

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION**

**CALIFORNIA ENERGY COMMISSION  
RENEWABLES PROGRAM COMMITTEE WORKSHOP  
(96-REN-1890)**

**Tuesday  
November 5, 1996  
10:00 A.M.**

**1516 Ninth Street  
Sacramento, California  
Hearing Room A**

**REPORTED BY:**

**A. FLYNN**

**COMMISSIONERS PRESENT**

MICHAL C. MOORE

JANANNE SHARPLESS

**STAFF PRESENT**  
(Alphabetically Listed)

Manuel Alvarez

Susan Bakker

Jonathan Blees

Susan Gefter

Carrie Hilton

Bob Huffaker

Marwan Masri

Katherine Nicholls

Vince Schwent

Rosella Shapiro

**ALSO PRESENT**  
(Alphabetically Listed)

Donald Aitken, Union of Concerned Scientists

Bud Beebe, Sacramento Municipal Utility District

Traci Bone, Oxbow Power Group

Rich Ferguson, CEERT

Ranji George, South Coast Air Quality Management District

John Grattan, Grattan, Gersick, Karp and Miller

Bob Judd, California Biomass Energy Alliance

Steven Kelly, Independent Energy Producers

Jim Kennelly, Project Development

Jody London, Working Assets

Eric Miller, Foresight Energy Corporation

Jay Morse, California Public Utilities Commission

Nancy Rader, American Wind Energy Association

Phil Reese, CALMAC Energy

Kathy Treleven, Pacific Gas and Electric

Howard Wenger, Pacific Energy Group

John White, CEERT

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## PROCEEDINGS

**PRESIDING COMMISSIONER MOORE:** Welcome to the workshop conducted under the direction of legislation established under AB 1890.

Let me reintroduce myself. My name is Michal Moore. I'm Presiding Commissioner on the Committee, the Renewables Committee that will be making a set of recommendations to the legislature in March of next year.

My colleague, Jan Sharpless, second member on the Committee, is here with me as well as our aides. Susan Bakker to my right; Rosella Shapiro to Jan's left; and Jonathan Blees, our lawyer, to Rosella's left.

We have our Staff at the front table, and the head of our Staff effort is Marwan Masri, and he'll be introducing each item as they come up today.

I need to make one revision to information that we put out yesterday. Electronic filing to the Commission should be done via a filing docket at [energy.state.ca.us](http://energy.state.ca.us). That's available in the back, but I want to make the correction. We've summarily executed the Staff member who made the mistake yesterday and hope that that takes care of it. We try to do things as ruthlessly and efficiently as we possibly can here.

So I should also tell you that Public Advisor's Office is represented by Katherine Nicholls who is in the back and who has the blue cards. And please, if you have multiple items that you'd like to address us on today, would you so indicate on the blue cards. It makes it just a little bit easier to kind of keep track of what people want to talk about.

Although as a practice, as you saw yesterday, for those of you who were here, it's a pretty open process, and we've been able to successfully sort of reach out into the audience and pull people up at the end of each time. Especially if a set of comments raised questions in your mind or cause you to think about something that you weren't prepared to speak on, we're pretty open to that.

And we actually had what I consider to be a pretty instructive forum yesterday at the end of the day calling on people, unsuspecting folks in the audience, to participate in a round table up here. That's probably why there are fewer people.

That's a reasonable response.

I doubt that we'll call on the same people today for that same kind of forum should we choose to have it. You never know, though, and only by participating do you get in that lottery for the Hawaii trip. So you know, you won't know whether you're going to be called or not until the end of the day.

With that, let me turn to Staff and ask Marwan if he might just summarize where we came from yesterday, and then I'm going to ask him to open up today's topic which is the certification process.

Marwan.

**MR. MASRI:** Thank you, Commissioner Moore.

This is one area where I think it cuts across several areas that have to do with this job before us coming up with the recommendations for the renewable industry per AB 1890. Certification is the main relevance of this issue to the decisions that are going to be made in the future really have to do with direct access.

That is consumers, provision in the bill Section 365 has a provision, it's not really in the section that requires us to do this report, but it's very relevant to what we're doing, gives consumers the privilege of having direct access immediately irrespective of any phase in schedule if they purchase half of their load from a renewable provider as certified pursuant to Section 383 which is the one that requires us to do this report.

It is the gate that will open the market for renewables to the customers. And to the extent that there's an incentive to be first out there to market renewables to customers, we would like to know how important that incentive is, how significant that market do you think is going to be for renewables that can get out there very quickly and start selling to customers after they get certified, and then ideas about how this certification process can be made simple and at the same time effective and informative to consumers. And any verification process that may be needed and how often that should be done; and, again, how can it be done simply but at the same time ensure that information is quality information that consumers can actually use in making decisions which renewables to buy and whether to buy renewables or not.

And in the next -- should I talk about the next item as well? I mean today's agenda really goes, it's very relevant, these two items tie in together because on implementing statutory purposes the next item we're going to go into is how to encourage new markets for renewables.

And, again, certification, direct access, and another issue that really goes to the heart of this that will be very useful for the Committee and the Staff to hear about is this CDC rebate from the 540 or whatever the amount is renewables fund. The Commission is to make recommendations which would allow the customers to receive rebates from the funds if they purchase power from renewable providers.

This issue is very strategic because it really goes into the focus on consumer versus supplier. You have one pot that's going to go to both here. And so to the extent that you can make comments on, we know there are various perspectives out there and where the emphasis should be, but you have one fund that's going to both sides, and to the extent that parties can give us their view on, for example, how far should the rebate be allowed to proceed, can it be limited, should it be limited, or should it be first come/first serve between suppliers and customers, how should we deal with this issue if it goes to the heart of whether you focus on the demand side or supply side of the market.

**PRESIDING COMMISSIONER MOORE:** Thank you, Marwan.

Jan, do you have opening comments that you'd like to make today?

**COMMISSIONER SHARPLESS:** No.

**PRESIDING COMMISSIONER MOORE:** With that, I'm going to open the hearings, workshop, excuse me, and we'll be talking about certification. And as Marwan indicated, we're going to be spending some time talking about the markets, the future markets, and how to construct them, how to make them effective and efficient as we go along.

So let me start with Les Nelson.

All right, so you want to go on to the very last part, okay.

Then let me turn to Traci, ask her to come up.

I should remind everyone if you'd identify yourself for the record, and if you brought a business card with you, our scribe would love to have it. Makes it



just a little bit easier. And if you have a name that is unique, and you know better than me if you've had question marks on that in the past, would you please spell it out. Makes it just a little bit easier.

Ms. Bone.

**MS. BONE:** Good morning, Commissioner Moore, Commissioner Sharpless, Commission Staff and workshop participants. My name is Traci Bone, and I'm here today on behalf of the Oxbow Power Group.

The Oxbow Power Group is an independent power producer with projects in the United States and world wide. The power group holds interests in and operates five projects totaling approximately 400 megawatts of capacity. Three of these facilities are geothermal facilities. Two of these geothermal facilities produce approximately 60 megawatts which Oxbow sells to Southern California Edison under two long-term standard offer contracts.

Oxbow's asked me to come here today to discuss renewable certification program with you. The renewable certification process established by the Commission will prove a critical component in determining the success of AB 1890's renewable provisions.

Oxbow believes that the certification process should be simple without significant administrative burdens, yet should also ensure that only legitimate renewables are certified to receive benefits under the program.

With these goals in mind, Oxbow respectfully proposes that the Commission look at the FERC QF standards for its starting point. There is no reason for the Commission to re-invent the renewable wheel. FERC's QF standards for certification were developed to meet many of the same goals as AB 1890, to encourage the development and growth of the renewable industry.

It even appears that the drafters of 1890 intended to follow to some extent FERC's QF criteria. Under the FERC QF rules a small power producer cannot use more than 25 percent fossil fuel in its process. AB 1890 has a similar provision of which I'm sure you're aware.

The FERC QF rules for small power producers contains size, fuel use and ownership criteria for renewable technologies to qualify as QFs. The

administration of the FERC QF program is fairly simple. A facility may self-certify by filling out a simple form and serving it on interested parties. The facility also notifies FERC of any changes in its facility by re-certifying in a similar fashion.

A QF failing to keep FERC apprised of the true status of the facility risks revocation of its QF status and the attendant regulatory burdens that come with that.

Oxbow proposes that as a threshold requirement the Commission require that a renewable be certificated as a QF under the small power producer criteria. Once a facility meets this threshold requirement, it must then meet the minimal requirements of AB 1890.

The primary one remaining that the facility is not a conventional power source under PU Code 2805. In other words, that it's not a nuclear facility and that it's not a hydro facility over 30 megawatts.

Oxbow makes this proposal not to categorically exclude non-QFs but for administrative efficiency. QF status as a threshold requirement leaves those already determined to be renewable producers from being subject to two and perhaps disparate renewable requirements.

The FERC QF program has the advantage of already being established containing ongoing certification requirements and containing a monitoring process whereby anyone may challenge a facility's QF status.

For all of the foregoing reasons and several others which are listed in our written comments which I will file with the docket office, Oxbow respectfully proposes that FERC QF status be the threshold requirement for the Commission's renewable certification process.

I would be happy to try and answer any of your questions. And I've also put additional copies of my comments out on the table, and I have some with me if the table is out.

**PRESIDING COMMISSIONER MOORE:** Good. Thank you, Traci.

You're going to submit a written copy of the suggestion that you made as well as the backup for it.

**MS. BONE:** Yes, sir.

**PRESIDING COMMISSIONER MOORE:** Good.

Questions?

**COMMISSIONER SHARPLESS:** Yes. I'm interested in a little bit more detail on the FERC process. Is it an annual process?

**MS. BONE:** No, it's a process in which when a change occurs in the prior information that the QF has provided to the FERC, then it would notify FERC through a re-certification process.

So initially, if a QF decides to sell certify, and there are other certification methods but the typical one is self-certification, the QF fills out a form which lists many of the efficiency criteria and who owns the facility, all of the information that FERC needs to determine whether the QF meets its requirements. And then any time that there is a change in that kind of information, for example, the ownership of the facility or the fuel use of the facility, then the QF would have to send in a re-certification form to FERC to notify them.

And if the QF fails to do this, and someone catches them, in most situations it's a utility goes to FERC and claims that the QF isn't a QF, then the QF risks losing its QF status and being subject to federal regulation.

So there's a lot of self-monitoring built into the system.

**COMMISSIONER SHARPLESS:** Okay. There's no monitoring done by FERC itself?

**MS. BONE:** Actually there's a provision in the QF rules that allows anybody to bring a claim to FERC that the QF is not following its rules. And so under that procedure if FERC had an indication that somebody, that a QF did not qualify, it could raise this issue itself.

**COMMISSIONER SHARPLESS:** But it's generally brought to the attention by someone who has suspicions.

**MS. BONE:** Precisely.

There are enumerable numbers of cases. I've actually cited FERC cases in a footnote in the document I'm providing you in which various utilities have gone after the QFs, have gone to FERC and questioned the QF's status at FERC and challenged it. So right now there is a very effective self-monitoring provision built

in.

**COMMISSIONER SHARPLESS:** What does the certification by FERC allow the QFs to do?

**MS. BONE:** The certification allows the QF to not be subject to federal public utility regulation, i.e., PUHCA. So there are a lot of benefits to being certificated as a QF.

And, in fact, I can't imagine any renewable provider in California that isn't certificated as a QF and that wouldn't want to be.

**COMMISSIONER SHARPLESS:** I think your comments also recognize that there might be some renewables that would need to be certified that do not have a QF status.

**MS. BONE:** Our comments recognize that. We don't know of any at this point. I can't imagine that there would be a renewable producer out there that would not want to be exempt from the PUHCA requirements. But I can imagine in the future if there are new technologies or if there are changes in PUHCA, that there will be different desires.

So it's more of a future looking proposal in that way, recognition, that, you know, at some point in the future there may not be not everybody's going to want to be a QF. There may be alternative technologies that we aren't aware of that wouldn't qualify for QF status. But I would leave that to people out there who can perhaps edify me in some way.

**COMMISSIONER SHARPLESS:** Does the law specifically pertain to, in the certification, to generation facilities?

**MR. MASRI:** It talks about renewable resource provider, which may be --

**COMMISSIONER SHARPLESS:** Does that present a problem?

**MR. MASRI:** That's a question, actually, whether the certification be on a project basis or on a portfolio basis for a supplier who may have -- in the FERC, I think, works on a project basis.

**MS. BONE:** Yes, yes, they do.

**MR. MASRI:** Now here you may have to do it beyond a project. And

in which case the FERC requirement may or may not readily transfer to that.

**MS. BONE:** Right. And in our comments we limit it to talking about renewable generators.

**PRESIDING COMMISSIONER MOORE:** Well, you're setting up a model for us. You're setting up a structure as opposed to trying to superimpose the FERC system on this.

**MS. BONE:** Well, to the extent that someone has already been certificated as a FERC QF, for administrative efficiency it doesn't make sense to make them jump through more hoops other than the ones required by AB 1890. In our minds.

**PRESIDING COMMISSIONER MOORE:** Well, unless we didn't use the system that FERC uses, which is to certificate a project, if we went to an industry or a category, we might just be using the concepts that FERC has iterated in laying them over this.

**MS. BONE:** That is certainly an option.

However, I would think you talk about certificating perhaps a marketer that sells renewable, and in that situation what I would propose is that you certificate projects and then the marketer can buy from certificated projects. And that cuts down on the number of people that are constantly coming to the Commission for certification.

I mean ultimately the goal is to make sure that whoever's generating the electricity is a renewable provider.

**PRESIDING COMMISSIONER MOORE:** Right.

Marwan, did you have another question?

**MR. MASRI:** I just want to add that the certification by the FERC in addition to giving exemption from PUHCA the importance of it is it gives the project the right to sell power to the utility at avoided cost. That's really the big privilege that they get.

**MS. BONE:** That's another one.

**MR. MASRI:** And I think what you're hearing here today is two things about the FERC process. One, it's self-certification. You can just look at that

separately from the rest of it, which is take the QF status, the proposal here, and adopt it as being sufficient for certification.

So I think the self-certification part of it can be looked at regardless what you do. Whether you follow the rest of the recommendation or not, the self-certification should be looked at as separate proposal from the rest. I think what Kathy's proposing.

**PRESIDING COMMISSIONER MOORE:** Okay.

**COMMISSIONER SHARPLESS:** But the language of the law does talk about renewable resource provider.

**MR. MASRI:** Right.

**COMMISSIONER SHARPLESS:** Versus project versus facility.

**MR. MASRI:** Right. But you can have, for example, a provider self-certify, for example. Just like a project owner does for FERC.

**COMMISSIONER SHARPLESS:** I'm just wondering if there was a reason why the Legislature used that term versus something more specific. Can anybody enlighten me on that? Steve Kelly can. Describe.

**MR. KELLY:** Steven Kelly with the Independent Energy Producers Association.

The intent was to make clear that existing renewable generators that are FERC certified QFs would basically automatically be qualified for this program by the basis of that status.

Was also recognized that in the new market structure it may well be that we will be certifying two types of entities. Generators and marketers, aggregators, who would be providing renewables to end use customers. So that you may consider a certification process for providers which would be generators who may or may not sell to aggregators, and, also, the aggregators themselves that will be dealing with end use customers.

**COMMISSIONER SHARPLESS:** So there was a contemplation that there might be two different types that would be receiving certification.

**MR. KELLY:** That's right. There would probably most likely there would be two types of entities that would require some kind of certification to make

clear to the end use customer that the people they were dealing with were, quote, “renewable.”

**COMMISSIONER SHARPLESS:** In that event we would need something other than the FERC process.

**MR. KELLY:** I think that’s true. Because it’s certainly true that the marketers, for example, are not, while approved, I don’t know if they’re certified by FERC, it’s a different process than is for QFs.

**COMMISSIONER SHARPLESS:** Oh, they do have a mechanism at FERC to do --?

**MR. KELLY:** FERC does approve applications for power marketer status, yes.

**MR. BAILEY:** But not specifically renewable providers.

**MR. KELLY:** That’s right. That’s right.

**MS. BONE:** That’s not in federal law.

**MR. KELLY:** That’s correct.

**COMMISSIONER SHARPLESS:** Okay. Thank you.

**PRESIDING COMMISSIONER MOORE:** Thank you.

Thank you, Traci.

All right. I misread a couple of the cards here. I wasn’t expecting comments on our Item 6, which is a recap where I assumed I would return to Staff, but a couple of people have indicated they wanted to talk to us about that. So let me turn to them and ask for some brief remarks, if you want, on Item 6 since it is scheduled.

Jim Kennelly.

**MR. KENNELLY:** My name is Jim Kennelly. I’m with Project Development.

I thank you for agreeing to hear from us for a moment. We should have spoken yesterday, but this morning, Mr. Moore, when you mentioned the Hawaiian trip, I thought it was imperative that we speak.

**PRESIDING COMMISSIONER MOORE:** It’s important if you want to get in line for the lottery.

**MR. KENNELLY:** Want to get in the drawing, absolutely.

I represent the Counties of Orange, Sonoma, the City of Sacramento and Neo Corporation. And Neo is a developer and a subsidiary of Northern States Power in Minnesota.

What binds these four people together is their landfill gas renewable resources. Nearly every county and city in California has this resource to deal with. And of the renewables that you're going to be looking at here, landfill gas is the only one in this room that's required by federal and state law to be gathered. Now once gathered, they can either use it as a renewable resource or it can be just wasted or destroyed.

We've participated in the PUC restructuring since the very beginning. We were invited to speak to the PUC in the first meeting in Los Angeles. We expressed our goals and concerns, and they have not changed.

What I would like to mention to you especially --

**COMMISSIONER SHARPLESS:** Excuse me, which hasn't changed? The CPUC or your goals?

**MR. KENNELLY:** We've held fast. Now I don't know how you would describe their position. I do think, though, that the power seems to have moved to Sacramento, and we're all here.

I think what is most important that we should have told you yesterday is that we were active in the PUC renewable working group process, and we were supporters and sponsors of EDF's surcharge program. And in seeing what Dan presented to you yesterday, we believe that perhaps once again we would be supporting his program.

And that is because the goals that we have always had were, as he pointed out, simplicity. We were very strong that we wanted a straight bid process. We didn't want to get into a beef on whose green's greenest, whose company needs aid, or whose management is ailing, or whatever the case. And we did not want tears or set asides. We just wanted the pure market approach.

So that's what I wanted to tell you as far as what happened yesterday. We may have a slight concern with this discussion of new project versus old, or



new versus existing. We thought it was clear what this means.

The only way it affects these cities and counties is that they're under regulation now to get these projects completed. To do that and qualify for some tax credits, they have to be operational by December 31 of '97. And then the next day is the cutoff for your new versus existing. And we felt that we were better off to be a new project.

At least two of these are already under construction here in California, and there's about eight or ten more that are in various phases. So we think we would be better off. We think that this industry would be better off if we are new.

And in Dan Kirshner's original proposal his cutoff date was the December 20, 1995, date of the Commission's order. That's just something to consider. I think the rest is kind of self-evident from our goals. We weren't too interested in tears and did very much like what he presented to you.

Appreciate your patience.

**PRESIDING COMMISSIONER MOORE:** Good. You'll submit those comments to us on the definitions, especially those dates. It seems to me that's an interesting dilemma on the day, 24-hour split there on the, you know, what qualifies. So if you'd send us a letter on that, we'd like to have it on our file.

**MR. KENNELLY:** I'll do that.

It was only a dilemma in that the counties decided early on that they would not pursue some kind of a rebate, some kind of a subsidy for existing projects, because they have some standard offer four projects. But they said, well, they thought it was good policy that they looked to new projects.

But other than that, you know, we could live with the date either way, but, you know, it does cause that concern, and I would be glad to submit that to you.

**PRESIDING COMMISSIONER MOORE:** We appreciate that very much.

**COMMISSIONER SHARPLESS:** Can I ask a question?

**PRESIDING COMMISSIONER MOORE:** Yes.

**COMMISSIONER SHARPLESS:** You're talking landfill gas, right?

**MR. KENNELLY:** All of this is landfill gas.

**COMMISSIONER SHARPLESS:** And where does your landfill gas go? Where are you selling? To whom are you selling it?

**MR. KENNELLY:** Until January 1 of '98 we are selling to the utilities in California. And in this case all three.

**COMMISSIONER SHARPLESS:** So cogen?

**MR. KENNELLY:** These are small power producers, as was just discussed.

**COMMISSIONER SHARPLESS:** Oh, I see. So you're collecting the gas and you're actually producing electricity. You're not just gathering gas.

**MR. KENNELLY:** Right. There's 180 megawatts of landfill gas generation in California right now today.

**COMMISSIONER SHARPLESS:** Right, I'm aware.

**MR. KENNELLY:** And that's right, we are gathering the gas, using it as a fuel in generating electricity. As I mentioned, it can be in many places as just destroyed they put it to a flare. But as you probably know, the EPA is pressing very hard, and this is in the US EPA's climate change action plan that landfill gas should be gathered and you should generate electricity. And that came out of the Rio Conference of 1992.

**COMMISSIONER SHARPLESS:** So you believe that you will be able to, with something like the EDF proposal, be able to market your small generation facilities in a green market arena?

**MR. KENNELLY:** I don't know. We're also working in a project in Tacoma, Washington, where they were going to do just as we've speaking about here, and finally everybody backed out of it because of the cost to market. Nobody's really addressed that here.

Yes, we think it's marketable. Certainly EDF and others do. Other speakers here have said that, but I think there apparently is a major concern about how much does it really cost to do this.

**COMMISSIONER SHARPLESS:** Are you talking about transition? Transaction costs?

**MR. KENNELLY:** Just the fact of sending a postcard to everybody or

putting --

**COMMISSIONER SHARPLESS:** Transaction costs.

**MR. KENNELLY:** Yeah. There was a mention here of perhaps it would be done best by professionals where you grouped all technologies together. That seems to make a lot of sense because I think the costs are maybe greater than we would imagine.

**COMMISSIONER SHARPLESS:** Thank you.

**PRESIDING COMMISSIONER MOORE:** Good. Thank you.

**MR. KENNELLY:** Thank you.

**PRESIDING COMMISSIONER MOORE:** I'm going to continue the jumping around to accommodate someone whose schedule has changed. So, Eric, I'm going to ask for your comments prior to losing you.

**MR. MILLER:** Thank you very much for accommodating me. I will be back after the lunch break.

Eric Miller, Chief Executive Officer of Foresight Energy Corporation. Wanted to speak to the certification process. And I think there are really two goals of that process.

One was to make sure, probably the primary one, was to make sure that people taking advantage of whatever benefits are provided by 1890 for renewables in fact qualify for them. I think that's the principal goal.

I think a second goal was a degree of protection on the consumer side. Although I think that job has been allocated actually to several different agencies, and so I think it's important to remember that that's the Energy Commission has a piece. That the Public Utilities Commission will be actually certifying retail providers in the sense of being licensed to sell electricity to consumers.

And so many of the consumer protection in the sense of business viability and other things are going to be extensive scrutinized by the Public Utility Commission. And so I think that's a job that's already being taken care of irrespective of renewable or nonrenewable.

And so to even qualify as a renewable provider, you have to get first certified at the Utility Commission as a qualified retail provider.

In addition, there's also a number of, and this is less defined, but there's certainly the existing consumer protection agencies and laws in place which certainly apply to in terms of truth in advertising and those sorts of things. So that's another area in which there's also existing agency involvement in this.

And so I think the focus for the Energy Commission is, I think, two fold. One is are the projects that are generating the electricity in fact renewable. And the other is are the providers providing electricity specifically past the, in this case, the 50 percent renewable test if they're taking advantage of the go first provision. And those are specific tasks, I think, that are before this Commission.

I agree that the FERC, a FERC-like certification process for projects makes sense. If someone is a wind or biomass or geothermal project, it's a fairly straightforward thing as to whether or not they're a wind project. And it's fairly easy to check, and, therefore, not very easy to misrepresent.

I'm unaware of, in the renewables side, I'm not aware actually, I'm sure there may have been some, but there's been no wide spread difficulty with compliance on the FERC certification for renewables. Where there have been some challenges, it's been on the cogen side where there's been some fairly subtle efficiency tests and things that are subject of ongoing operations. On the renewables side it's really been quite straightforward.

And so I think that is a good model to use for this, and basically someone can say: I'm a renewable. Here's how big I am. Here's where I am.

And what we'd recommend is that they would make that application to you, you would review it, review it, although I think there's not a lot to review, and would issue them some sort of unique certification number or some sort of designation that they are a certified renewable resource.

And then at the end of each year you would ask those projects to report to you the total energy they provided, they sold, and to which certified renewable providers they sold it to. And the reason for that I'll get to.

In renewable providers the key here is we're wanting to make sure that they've produced it, they've at least utilized 50 percent renewable energy, and we would propose on something like an annual energy basis that that would be the

basis of it. And so what you want to know is that half of their energy came from certified sources.

And so we would suggest is initially there would be, since you couldn't completely certify in advance, because the degree of the portfolio necessarily because of the marketplace is going to move around a little bit, and so someone would need to come in and make a showing that they had customers and that they had a base of supply that was credible of how they were going to, that was credible, and they would be then, I would call it more of a registration than a certification.

And then at the end of each year, the provider would give to the Commission what the total energy that it sold to customers was and how much energy it purchased from each of the certified sources.

You would have data then from the sources that would say we sold certain amount of energy to each of these providers, and then you can then compare that data and make sure that it all adds up. And I think by doing so you can fairly simply monitor to make sure the providers are, in fact, meeting the requirements of the legislation.

The process for the actual producers, the projects can be quite straightforward. They really don't, all they really need to do is this self-certification and provide you an annual energy generation.

In the case of the wind reporting system, they're already providing more data than that actually. So in some cases you would actually need less data than you're getting from some of the sources than you're currently getting.

And I believe that's a process that will get you the data that you need to be able to conclusively determine that each provider is meeting the requirements without a lot of complex, I think, that's a practical system that can work.

**PRESIDING COMMISSIONER MOORE:** Bob, do you have a question?

**MR. HUFFAKER:** If we decided that projects that use more than 25 percent fossil fuels should be eligible for some of the renewables funds, is that compatible with this process?

**MR. MILLER:** I think, as I've understood the legislation, that a project, a test of whether it is a renewable project, whether it's a renewable project or not, is

the 25 percent test would cover that.

And I guess if you wanted to change that test, at least the way it's structured, you would have a renewable, you would have a test of whether it was a renewable project. You would then have a test that at least 50 percent of the energy for a provider has to come from renewable projects.

**MR. HUFFAKER:** I was getting more at a project that would use maybe -- people yesterday were talking about making projects that use more than 25 percent fossil fuels eligible for a portion of it being eligible as a renewable project.

**MR. MILLER:** Yeah. I guess my personal recommendation is to look at the portion of the project which does meet that test and make your, call that a renewable, and allocate funding and other priorities based on that and treat the other half, or whatever piece is left, as fossil. I think that makes it eligible.

I guess I personally wouldn't necessarily recommend providing renewable funding to the fossil portion beyond what's provided in the legislation. And I can't imagine of a technology that you couldn't find an allocation approach that would allow you to kind of draw a line there.

**MR. HUFFAKER:** I'm just trying to see if this self-certification process works simply with that.

**MR. MILLER:** I think any time you've got a mix of fossil in there, then you have, and the FERC process works the same way, you have a higher standard of data. You then, you normally, I wouldn't, for a cogen facility, for example, I wouldn't call the FERC process a self-certification. They provide fuel balances and engineering calculations designs of the project, and FERC actually reviews those and makes its own determination that in fact the efficiency and the fossil fuel use balances are there.

And, in fact, also if you're using fossil, there's an annual report required, which isn't required of pure renewables, as to what your total generation and what your fuel consumption was to make sure that you have maintained that.

So once you introduce the fuel use, then I think there's a little more diligence required. I think, again, the FERC process is probably instructive of how to do that, and it's worked pretty well.

**PRESIDING COMMISSIONER MOORE:** But you haven't changed the guts of it. All you've changed is the implementation or the standard that has to be met in any given case.

Marwan, did you have a question?

**MR. MASRI:** Yeah.

Eric, I can see where it is sort of straightforward if somebody's buying power from some renewable sources and nonrenewable, then at the end you can match the sales and the purchases and see if they met 50 percent or more.

What about a supplier who directly owns, say, fossil and renewable power and sells a mix? Now that mechanism you're talking about for verification is no longer there. They would simply certify that they generated, in your example, half of their power from renewables?

How would the verification work in that case, where there is no intermediary and goes directly from supplier to customer?

**MR. MILLER:** I see that the source of certification for the project is the project, irrespective of ownership. And the requirement, the certification requirement and the submission of data on that, it really is irrespective of ownership. And that's, you know, each project is going to be an entity in terms of the ISO.

There's going to be meter, they're going to be meter, they're going to be separately metered, every facility's going to be separately metered. And so I think I guess I would say that this should be provided irrespective of ownership.

That the provider, if they're acting as a provider, they would have the same burden to supply the data of which certified sources the energy came from.

If they happen to also own them, I don't think it changes anything at all. That source has to have a meter on it. They're going to know how much energy

--

**MR. MASRI:** So you propose it would be each project would be separately metered?

**MR. MILLER:** Well, they are. They are now. Each point that a project interconnects with the utility there is a meter today. So I don't think, and a new

project would have to be metered. It can't get scheduled by the ISO without having a, I mean you can't work without a meter.

So there is a metering point where it moves from the end of the transmission system from the project system. There's always a meter at that point. I mean actually whether you're a customer or a supplier, there's a meter at that point.

And so I think, I don't see it, so anyway, I don't see a difficulty there.

**MR. MASRI:** One last question. Are you proposing 50 percent or using that as an example?

**MR. MILLER:** Well, I think 50 percent is what the legislation has directed the Energy Commission to --

**MR. MASRI:** It says 50 percent of the needs of a customer. And what you're talking about is transferring that to be 50 percent of the power generated by a supplier. They're two different things.

**MR. MILLER:** Oh, I guess I would describe it in a way that there's a connection between the two. The power supplied, the power that is supplied to the customer by the provider has to have, that's a certain amount of kilowatt hours, they propose an annual kilowatt hours. Fifty percent of those, that number of kilowatt hours, has to have been generated by renewable resources.

**MR. MASRI:** It's not in the bill, is what I'm saying.

**PRESIDING COMMISSIONER MOORE:** What you've done is you've collected and annualized the numbers in both cases.

So if we had a hundred customers and we aggregated their needs and their demands over a year's period, and you aggregated similarly the output that served them, which the standard that you're proposing is it meets the 50 percent test. And so rather than try and get down on a micro managed level where you're looking at each person who actually got supplied, or each firm that got supplied, and say did 50 percent of this amount to renewable power, you've simply done an aggregation averaged it on a big scale, annually.

**MR. MILLER:** I think that's what in reality what happens, I mean given the reality of the grid, that's what happens anyway, and I think it's a relevant point.



I believe that the intent of the legislation was, was that kind of an aggregate, aggregate balance. I don't believe there was any intent to make it, for example, line up on an hourly basis or something like that.

**PRESIDING COMMISSIONER MOORE:** All right. Well, the technology would at least make that hourly or daily reconciliation very difficult. I mean that's a set of algorithms that, and I'm not certain, at least as I heard the legislation and speaking as a person who works in that kind of a field, the numbers field, I'm not prepared to offer a solution that's that cumbersome and that meddlesome, if you will.

The aggregate solution is one that takes us a lot further anyway.

**MR. MILLER:** And I think it's consistent with what the consumers are interested in as well.

**PRESIDING COMMISSIONER MOORE:** Jan, do you have questions of Eric?

**COMMISSIONER SHARPLESS:** Well, Eric seems to be focusing the entire certification of renewable resource provider on whether or not a resource, renewable resource provider provides the 50 percent to qualify for direct access. Right?

**MR. MILLER:** Yeah, I do, not because that's the only question a consumer might be interested in, but my reading of the bill is that that's the particular task the Legislature set before the Energy Commission.

**COMMISSIONER SHARPLESS:** Well, I'm wondering if that's the only kind of provider that's out there. That's the kind of provider you want to be, but I'm wondering if there is other types of providers that may focus on different markets in a way that you're not viewing it.

**MR. MILLER:** Oh, absolutely.

**COMMISSIONER SHARPLESS:** There are two provisions of the law. One that says that they should, we should set up a system to certify renewable resource providers, and then there's another provision that talks about customers being eligible for direct access if they are provided 50 percent of their electrical load by a renewable resource provider.

**MR. MILLER:** I guess my opinion is that there will, of course, be other, many other retail providers, and we don't expect to be the only or largest by any means in that.

If those providers are not taking advantage of any of the renewable provisions of AB 1890, then, in my opinion, the legislation doesn't require them to be certified through this agency. There would still have to be certified through the Public Utility Commission.

But if they don't intend to take advantage of any of those provisions, there's no need for them to be certified. And I would at least not propose that the Energy Commission require them to be certified unless they want to take advantage of the provisions of the bill.

**COMMISSIONER SHARPLESS:** Well, generators may be taking advantage of the bill, and they may not be selling just a 50 percent basket. They may be selling, I mean they may be using other provisions of the law to qualify for other things.

**MR. MILLER:** And I think for that reason you probably will need to know the total energy produced by both individual projects and by suppliers to make sure that you're focusing on the right piece.

**COMMISSIONER SHARPLESS:** I guess the question gets down to do you think the certification process was established by the Legislature only to qualify for this 50 percent provision?

**MR. MILLER:** I do.

**COMMISSIONER SHARPLESS:** Okay. I don't know that there's total unanimity in this group at all, but I think that's an important point and that's the very point that I'm making.

If we design a certification process just for that one provision, then we look at meeting one set of goals. But I'm not sure that that's the only game in town here. Folks?

**PRESIDING COMMISSIONER MOORE:** Okay. Thank you, Mr. Miller. We appreciate it.

And I'm going to return now to the cards that we have, and we'll

proceed back a pace.

I'm going to invite John Grattan to come up and talk about Item 6 since that's what he had on the card. And then we'll resume the certification comments.

**MR. GRATTAN:** Good morning, Commissioners, Staff, public. John Grattan. Grattan, Gersick, Karp and Miller.

And I represent today the Ultra Power Three Blue Lake Biomass Power Plant, and I'm here to make a brief announcement that we have submitted on behalf of Blue Lake, on its way to be submitted, waiting overnight mail for signature, a Petition for Certification under Section 383 certification as a renewable.

And in that -- welcome. So you can cut your teeth on this.

I think it's a fairly, the points we've made in our rather short petition is, number one, the statutory definition of renewable resource technology, renewable resource provider, is crystal clear. And I believe Staff pretty much feels that way having echoed the statutory language.

Then number two, in the case of our particular plant, that we fit within that statutory definition.

Number three that you possess the authority to certify a plant that qualifies the current authority. That you need not wait until a report produced in March that that authority is inherent in the statute.

And that number four, and here's that granting of this certification as a renewable does not commit you as a Commission to any decision on the allocation of the \$545 million.

We do, to go over the point you were discussing with Mr. Miller, we do think that one certification fits all. You have two levels of decision. One is this a certified renewable that can take this certification, go out find a nice cheap conventional power source mix and get on the grid and sell to a customer. Now, that's sort of there.

Number two, is the Commission's decision as to how much a technology or a particular project, whichever way the Commission goes, merits of that \$545 million worth of ratepayer money?

And, again, we have recommended that our petition be included in

this docket filing. And look forward to discussing this with the Commission and with other interested members.

**PRESIDING COMMISSIONER MOORE:** Well, we certainly accept your filing for the docket. I suppose it's just too bad we didn't have this so we didn't have to have the hearings, and we could have taken that definition, you know, ahead of time.

I'm being a little facetious.

**MR. GRATTAN:** Yes.

**PRESIDING COMMISSIONER MOORE:** But we'll accept your letter and certainly whether or not the Commission as a whole would consider ourselves able to certify or proceed with your wishes, I'm not at liberty to say. I'm only one of five. But I bet we're probably inclined to wait through the hearings before we do anything like that.

**MR. GRATTAN:** I understand. We think that it will provide you actual facts before you and actual situation, and it may make the discussion a bit more productive.

**PRESIDING COMMISSIONER MOORE:** Good. Thank you.  
Jan.

**COMMISSIONER SHARPLESS:** Did you send it in on a FERC form?

**MR. GRATTAN:** We attached the FERC certification.

**COMMISSIONER SHARPLESS:** Filled out the blanks.  
Marwan.

**MR. MASRI:** I just want to clarify the record a little bit. The Staff has not proposed a definition for renewable resource provider. What we put up there was definition of renewable resource technology.

Now, to the extent that a provider uses a hundred percent renewables, clear cut that that's renewable provider. But the question is what mix of technologies you heard Eric Miller talk about 50 percent, we have not really proposed, just to clarify the record, what our definition of renewable resource provider --

**MR. GRATTAN:** I believe that it is a very confusing issue, that latter

issue. I believe whether a facility is a renewable facility is clear cut, and we ought to treat those two issues as not the same.

I mean a renewable resource provider has relevance for Section 365, and that, 365 of AB 1890, and that is, I submit very humbly, I submit is also is a decision for the Public Utilities Commission in that section, in Section 365.

**MR. MASRI:** I think it says in that section, a renewable resource provider as certified under Section 283, which is what we're dealing with here.

**MR. GRATTAN:** A renewable resource. First you have to be a renewable resource generator.

**MR. MASRI:** Yes.

**MR. GRATTAN:** And then you can match that load with conventional power.

The idea, again, I believe, being to allow a renewable to become more price competitive in the direct market.

**PRESIDING COMMISSIONER MOORE:** Well, we'll look forward to getting your filing. Thank you very much.

Kathy Treleven.

**MS. TRELEVEN:** I'm Kathy Treleven, and I'm from Pacific Gas and Electric.

And I really just wanted to ask a few clarifying questions, sort of serve the role of Marwan, and I, after hearing Oxbow's proposal, I unfortunately I'd love to be simple, but there are a whole lot of issues that that brings up that I'd love to have Staff and workshop participants help clarify.

First of all as a philosophical question, once a QF is not selling to the utility anymore, is it a QF? I really don't know.

Secondly, what about the resources in California that are renewable that aren't Qfs?

Certainly, I'm not talking about PG&E's resources. We're not going to be a direct access provider during this transition, and thus we don't, our own geothermal resources, for example, would not be certified to become renewable resource providers.

However, were we to sell one of those plants, I understand some of them are over a hundred megawatts, I think the FERC process certifies renewables up to 80 megawatts, seems to me this would be a sold geothermal plant would be more like a EWIG, exempt wholesale generator, who would then have to find a provider to carry that to the renewable market.

Secondly, the munis own some renewable resources, which I suppose they could sell to wholesalers who could sell into the renewable market.

So it raises a lot of questions for me, and I just wanted to raise those few issues.

**PRESIDING COMMISSIONER MOORE:** Do you have opinions on those questions?

[Laughter]

**MS. TRELEVEN:** I think I'd have to do a little more research to have opinions, but I'm afraid that the FERC certification in itself is not going to do it for the future.

**COMMISSIONER SHARPLESS:** Could I be perhaps a little more direct?

**MS. TRELEVEN:** Sure.

**COMMISSIONER SHARPLESS:** I think that those are interesting questions, but they're separable, aren't they, from the FERC process? I mean in other words the FERC process might be okay. It's just that things are changing so they may no longer fit as definitions within FERC.

**MS. TRELEVEN:** That's right.

**COMMISSIONER SHARPLESS:** Your questions deal with what if we follow the FERC procedures, but in the process of change, are the two questions you've asked, these people no longer fit within the FERC realm. Then we would have to deal with them.

It's not that you have some concern about the FERC process.

**MS. TRELEVEN:** No, but it seems like we may have already reached the path, the point at which the FERC process doesn't allow for the certification of every renewable in California that is already looking for this market.

**COMMISSIONER SHARPLESS:** That was my question, and the person I asked couldn't think of any instance where that would happen, and you just raised the instance.

Thank you.

**PRESIDING COMMISSIONER MOORE:** Thank you.

Steve Kelly.

**MR. KELLY:** Yes, I would just like to briefly address a few issues that have kind of come up in the last couple, the discussion that has preceded me and just try to help us move forward on at least my understanding of AB 1890 and what we're trying to do.

First of all, as I indicated earlier it was certainly the intent, I believe, of the parties that were addressed in the legislation to make sure that existing QFs that were certified by FERC as renewable providers, would basically automatically be eligible for certification in the California forum, which does not necessarily mean that everybody has to be FERC certified. It just meant that those people that were would be presumed qualified under whatever provisions that you proposed to develop here. And that would still be our position.

Regarding the FERC filings, I would just raise to your attention that the, in response to Commissioner Sharpless' questions about what that process entails, and I'm not an expert on the FERC QF certification process, but it is an annual process. There's also it's a QF compliance process at FERC. There's also an annual DOE reporting process.

And through those two reporting mechanisms that have historically gone on, information regarding fuel type, plant efficiency, total generation, not only what you produce, what you use in house, but what you sell and equipments information, are available through those filings.

And I think that what we would propose is that those reporting mechanisms may provide the basis for any reporting that's required for certification so the companies don't have to duplicate their efforts or expand their efforts beyond which they're currently reporting.

Now, beyond that, I think there's a couple other issues that have been

raised that I'd just like to address. One, and I think this is an issue that I think Commissioner Moore had raised, I probably should have brought this up yesterday, but I think in the definitions area of the proceedings one of the issues that will have to be addressed is the definition of load.

As you know, the bill provides direct access incentives for customers serving 50 percent of their load with renewables. And load is undefined. And it's probably something that needs some attention as we move forward to be able to identify what that is.

Now that issue is separate from the certification process I believe. And you can do the certification issues totally without regard to what it's going to take for resource providers to meet the direct access incentives in AB 1890.

Secondly, I would just offer that whatever we do in certification I think we need to make sure that, one, that it's relatively simple; and two, that it provides information to customers so that they understand when they are purchasing renewables in the market they are getting what they're purchasing.

But it's got to be a relatively simple process to make that understanding clear. I mean when we go to the market today to buy, people have used this example, low fat yogurt or anything, you see it on the label, and this is maybe a labeling issue, but, you know, this is low fat, you buy it, you buy it off the shelf, and you go and you pretty much know what you're getting. You may buy Dannon or you may buy Yoplait or something else, and that's a marketing issue, but you know you're getting Yoplait.

And I think what we want out of the certification process is customers' comfort that when they're buying renewables, they're getting renewables. Now whether it's a blend of renewables or a full package of renewables, that's a different issue, and that may be left up to the market, and it may be handled through a labeling effort.

If a provider, for example, is providing a hundred percent renewables, you could handle that issue by through labeling that maybe, you know, you give them some big label that says this is totally green, and it's a very dark color green that they get to put all over their marketing brochures. Somebody who's got 20



percent in their portfolio of renewables is less green.

I mean there are ways to handle that that are somewhat different than a certification process. And the certification we just want to make sure that the generators are renewable and providing what they say and that the providers have renewables in their portfolio. They got them from the generators in order to meet their market claims.

So that kind of gets at that issue about 50 percent and labeling, I think, that we've kind of circled around. And I just offer those ideas as things, as mechanisms, that are still need to be addressed as we move forward.

**PRESIDING COMMISSIONER MOORE:** Nancy Rader. Oh, sorry.

**MR. SCHWENT:** Steve, could you just expand a little bit on why you feel there's a need to define the word "load" for purposes of Section 365 I presume.

**MR. KELLY:** Well, I have a feeling that there's going to be aggregators out there that aggregate load. And there will be metering requirements on that.

I think it just needs to be understood that if, you know, if an aggregator is representing a community of residential customers, for example, I mean the question would be whether each residential, how would you handle that in terms of use. Is that going to be the load at the aggregation site? Is that how we're going to do it? Or is load going to be defined purely at the point of end use or meter for billing purposes?

I think there's just some issues out there that have to be clarified. I don't think there's too much dispute about it. It's just that people need to address that as we move forward.

**COMMISSIONER SHARPLESS:** But, Steve, isn't that clear if you're talking about customers' load, doesn't that narrow down the definition of what we're talking about?

**MR. KELLY:** I hope it does. I hope it does. I hope there isn't a lot of confusion about that. The focus was on customers' loads.

**COMMISSIONER SHARPLESS:** But your sense is there might be confusion about what customer load might mean?

**MR. KELLY:** Might mean when we get into the details. I don't know.

Maybe there isn't. But I hope there's not.

**PRESIDING COMMISSIONER MOORE:** Good. Thank you.

Nancy Rader.

**MS. RADER:** Good morning. Nancy Rader with the American Wind Energy Association.

I thought I'd present a few of our thoughts that sort of encompass a lot of these issues and then talk more specifically about some of the points that have been raised this morning.

We think the goal of a public green marketing transition strategy should be to overcome the transaction costs that will be associated with reaching those small consumers who are interested in purchasing renewables. And we think that will involve three components.

First of all, identifying those customers who are interested in renewables and educating them about the availability of renewable energy providers.

Secondly, providing those consumers with valid information with which to comparison shop among suppliers.

And, thirdly, to develop consumer confidence in the renewable markets so they feel comfortable that when they spend more for renewables that more renewables are, in fact, being generated. And that's critical to protect the integrity over the renewable market.

And to accomplish these things we think it's necessary to certify renewable energy generation, not just providers, but that there has to be a certification of each kilowatt hour, and that the amount that each retail consumer is purchasing should be disclosed. Consumers should know exactly how much renewable energy they are purchasing because that is the only way that they can shop around for the best deal.

You know, I'll spend more dollars if I'm getting more renewable kilowatt hours, but I don't want to pay an excessive premium if there's just a little bit of renewables in there.

So I think it's critical to base certification on kilowatt hours.

I think that's also going to be necessary to verify that 50 percent. It may be that one marketer has two products. You may have a power marketer that has a no renewable product and a hundred percent renewable product. And that's why I think that looking at the provider overall isn't going to do it because they may want to have different products for different consumers.

And so there has to be a certified kilowatt hours that can go to those consumers that are purchasing 100 percent renewables and have that direct access, you know, get in front of the line issue, handled that way so that we can attach certain kilowatt hours to certain consumers.

**COMMISSIONER SHARPLESS:** Are you talking like on a monthly billing?

**MS. RADER:** Yeah, monthly or annual or whatever it is. I think we have to know, I think there has to be an ability to assign kilowatt hours to particular consumers so that if, ENRON, for example, wants to have a green product and a non-green product, it can do that.

And I think the only way we can do that is --

**COMMISSIONER SHARPLESS:** That is the mechanism? Is that metering?

**MS. RADER:** I think the mechanism would be the certification of renewable energy generation. So the way I see certification working is that a renewable facility that meets the definition of renewables as defined in the law certifies their output. That output has occurred in the last quarter or the last year, they show evidence of that, they get a certificate to document that or to prove that, and then that certificate is transferrable.

So that a marketer can purchase the kilowatt hours and get the certificate that it can then assign to its green consumers and use that certificate to enable or to enable those consumers to get direct access.

So it would serve the purpose of both the direct access requirement, but also would serve to inform consumers about exactly how many kilowatt hours they are supporting.

**COMMISSIONER SHARPLESS:** So you're talking about something

other than a FERC process.

**MS. RADER:** Well, I think FERC QF status could automatically qualify a facility, but I wouldn't limit it to that. I would include a utility owned renewable plant so that if PG&E wants to advertise that it's got X percent renewable because of the geysers should be able to do that. And same for the munis.

But I think the FERC status might be one automatic qualification. You know, if you have that, then you're assumed to be renewable.

**PRESIDING COMMISSIONER MOORE:** The legislation assumed that, too. So you're restating. Thanks. Keep going.

**MS. RADER:** Secondly, we think that it's worth considering whether a renewable industry marketing board could verify and certify the production of renewable energy. So I think it's the renewable energy providers that have a vested interest in maintaining the integrity of the renewables market and in protecting the legitimacy of claims of renewable energy.

And an industry marketing board could charge a certification fee so that the cost of this program would be covered by the industry itself. And I would see it operating under rules set forth, either in law or from the Energy Commission, but I think it's an idea worth, we're thinking about.

It's also something that could dovetail with the public information campaign about renewable energy. I think there needs to be a generic marketing of renewable energy as a generic product the way the raisin board and the cheese, you know, say cheese billboards and that sort of thing.

The industry can promote renewables on a generic basis, and also inform consumers about what they should look for when they're purchasing green. That is inform them about the certification process. How they know how much renewables they're getting.

And I think this should include bill inserts that utilities should be required to carry in a bill to explain to consumers how they can shop for renewable energy. And I think that there's a provision in the bill that would allow for that.

That would serve to greatly reduce the transaction costs that are going to be involved in reaching each individual household. Because it's going to be a

very expensive to do that.

And lastly, I think that every retail electric supplier should ideally be required to disclose all of its fuel sources. But we don't have that authority in the bill, but I think it's something that we should think about.

That if we're going to rely on consumers, consumer choice to drive the renewables market, I think it's important to inform every consumer about where their electricity is coming from. Because it's only if you do that that the lightbulb goes on in their head when they look at their bill and say, gee, I'm getting all my power from nuclear and gas. I don't like that. Maybe I'll shop around.

Unless you have that information, if you don't have it, the burden is on us to inform consumers about where their power comes from, and that's a huge cost.

**COMMISSIONER SHARPLESS:** If the electricity is coming from the power exchange, how are people going to know where their electricity is coming from, Nancy?

**MS. RADER:** Well, it's a complicated issue, and that's why I don't expect it to be resolved by March. But I think it's something worth looking into.

If, for example, if everybody's selling into the power exchange had to disclose, I mean I think it wouldn't be too hard to track that information, and then whoever sells or whoever purchases power from the pool would just automatically be assigned that same fraction that's being sold into the pool.

**COMMISSIONER SHARPLESS:** All right. It's complicated.

**MS. RADER:** It's complicated. And that's why, you know, I think it's something the CEC might want to study over the next --

**COMMISSIONER SHARPLESS:** Glad you're not suggesting we color the electrons and we can keep track of them.

**MS. RADER:** I recognize it's a difficult thing, but I think it's worth studying.

**PRESIDING COMMISSIONER MOORE:** No reason why you couldn't start the renewable industry marketing board or such a thing yourselves and have it up and running and working as a model. I mean there's no reason that we would

have to get something like that started. You could have an up and running industry model that you then offered for replacement at some later date once it had proven its credentials and worthiness, as it were.

**MS. RADER:** Could be. There are, I think, the raisin board and the other boards do have some legislative authority, but we need to look into that issue.

**PRESIDING COMMISSIONER MOORE:** Good. Like to hear back.

**MR. HUFFAKER:** Who would pay for this generic marketing? Would that be the industry or would it be part of the \$540 million or another set of government funds?

**MS. RADER:** I think it might be reasonable to sort of prime the pump with some of the AB 1890 funds, but I think over time it could be included in the cost of certification. So there could be, you know, extra added to do the marketing.

**PRESIDING COMMISSIONER MOORE:** Yes, Vince.

**MR. SCHWENT:** Nancy, you mentioned that customers should know how much renewables they're receiving.

It was mentioned the other day that within the different technologies would you also advocate that they know on their renewable bill how much was wind, how much was solar, how much was geothermal, how much was biomass that they were receiving from a particular green marketer? Or just that it's all green?

**MS. RADER:** I guess I wouldn't, I personally wouldn't require that. Just because it's more complicated, but certainly a marketer can advertise that its renewables are better than somebody else's renewables, you know.

**MR. SCHWENT:** And on what basis would they advertise that their renewables are better?

**MS. RADER:** Well, I guess it's something to consider. I guess you could distinguish. You could certify, you could distinguish your certification by technology, and then, I guess that would be easily enough done.

**PRESIDING COMMISSIONER MOORE:** Right, but to what advantage? I mean I don't?

**MS. RADER:** I'm not sure the consumers really care.

**PRESIDING COMMISSIONER MOORE:** Right. Let's make it clear that that's an idea that is not being endorsed at this point. Thank you very much.

**MS. RADER:** Thank you.

**PRESIDING COMMISSIONER MOORE:** Rich Ferguson from CEERT.

**MR. FERGUSON:** Hi. I'm Rich Ferguson, the Research Director at CEERT. So many issues have come up, I just couldn't keep my mouth shut. I'm unlike Kathy Treleven, I don't promise to be so tactful, however.

We would also agree that the FERC definition is not adequate. We see a lot of different structures in the future. Plants built for the green market that could --

**PRESIDING COMMISSIONER MOORE:** Before you go too far, we've had several speakers talk about the intent of the legislation. Do you agree that the FERC certification does apply or would automatically let in current QFs?

**MR. FERGUSON:** Yes, we would agree it would. But it's not sufficient for what we think is going to come down.

But as for the certified provider and the 50 percent qualification, we support and including that in the legislation so that customers who want to buy renewables can go out and look in the market in day one. It was a customer incentive to let them go to market. It really had nothing to do with whether or not a provider was a certified renewable provider or not.

My understanding that when we were putting that together the certified renewable provider was merely the person who was selling the power that was generated at certified projects. And we see no problem whether they are offering their customers 10 percent, 15 percent, 100 percent or whatever. But I feel very strongly that so long as somebody out there making a claim that they are selling bonafide renewable power, that they need to be certified that, in fact, their power is coming from certified projects.

So I think the 50 percent is sort of a red herring. My feeling is anybody who is out there making claims in the market should be able to trace their supply back to certified providers. And it's my understanding that is what the intent of that was.

The 50 percent may be moot anyway. I mean San Diego's proposed no phase in schedule at all, and PG&E's is quite aggressive. At most, it's an issue for the first year or two. Whereas this is, you know, the sort of customer information is an ongoing problem that's going to be around for a long time.

We would not agree that any money for marketing or customer information on renewables should come out of the 450 --

**COMMISSIONER SHARPLESS:** Five hundred and forty.

**MR. FERGUSON:** Five hundred and forty dollar pot. It is important to do and we have already discussed with PUC and the utilities and the funding that is available for customer information, and our feeling it would be appropriate for some of that to inform folks that they can go out and buy power from different providers, including renewable providers.

We don't agree that this is the appropriate funding source for that customer information effort.

Just to comment on the power exchange. I had a conversation with David Freeman last week about this issue. He is very interested in as IO sets up its process that it have the ability to track where power is coming from and what goes into the power exchange mix.

We don't expect that that will happen any time soon, but it is something that the people who are involved with the ISO would like very much to have the ability to do. So that some time in the future, whether it's a requirement or just the market is going to demand it, that that be available.

It's also come up on the national level, those of you that know the debate between EPA and the FERC on the open access rule, being able to have real time data as to what's on the grid at any time in terms of emissions or power fuel sources and so on, is being discussed at the federal level, too. We don't see it coming any time in the future, but certainly this Commission should support efforts in that direction to the extent that they're feasible.

**PRESIDING COMMISSIONER MOORE:** Well, I'll simply add this. As the newest trustee on the tack for the power-ex that I'm sensitive to the request for having that kind of data. And since the RFPs are out for the design of the software,



it's not that it's no problem, but it's something that I think every one of the folks on the Committee are going to have in their mind as far as what the data that they would like to see coming out.

And clearly you're now talking to the two people who represent the Commission's interest in the ISO and the power-ex on our Commission, so I speak for one of them, and Jan can certainly speak for herself. But it seems to me knowing a little bit more about what we would like to have in the future helps design the systems and gets our input, let's say, a little more directed as we begin to deal with the other members so the ISO tack and the power-ex tack in designing these things.

That's a comment. I have a question for you. And that is on the direct marketing efforts, where, if the PUC were to contribute money or allocate money to a consumer education fund, and let's say that we determined, over your objections as I understand it, that some of this money might be relevant or appropriate in that same way from here, where would you spend the money? Or what group would you have spend the money?

We don't have the advisory board that Nancy Rader talked about. We don't have the moral equivalent of the Milk Advisory Board or something else to put money into. If we thought that was a good idea, and we thought at the very least consumers ought to be educated, that there is an alternative, read that large A out there, how would we redirect those monies to have that impact?

**MR. FERGUSON:** That's an excellent question. And I think our druthers would be not to spend the money that way, but to provide enough in the way of customer incentives so that the marketers can build in advertising money into their budgets.

Now, the tighter margin they have to deal with the price margins with the customers, the less funds there are for marketing and customer service and customer information. So I think rather than sort of try to do the marketing efforts for them from some sort of government funded agency, I would put the money on the customer side and make it as easy for them to go buy and expect that that be built into the price just like any other business.

**PRESIDING COMMISSIONER MOORE:** I understand the point you're

making. I guess if I harken back to the California's project that the Department of Commerce launched it must be eight years or so ago where the state determined that it was important to encourage tourism within the various regions of California and sponsored a statewide effort to bring that in. It's not unlike the state through this legislative action saying that renewables are important to the state as a whole.

And I'm not talking the subsets wind, biomass, etcetera, but where the State of California has through its legislative and executive arm determined that this category of enterprise, if you will, is important to the state as a whole, do we not have some responsibility to support that tone, that philosophy, with some dollar support or some executive office or even administration support?

**MR. FERGUSON:** But don't you think that if a rebate appears on a customer's bill that this is, you know, I don't know if you want to call it state funding or a system funding for the renewable industry to jump start the market, I mean isn't that the same kind of message that, yes, this is something that the state supports?

I don't know the answer to the question. It's a very good question. I'm leary of --

**COMMISSIONER SHARPLESS:** You're not necessarily talking about mutually exclusive --

**MR. FERGUSON:** No, not at all.

**COMMISSIONER SHARPLESS:** -- packages here. We're talking about, I believe, a marketing that would fit into a number of strategies that builds the market. The marketing board, I think, would have a life beyond what monies might be available for some type of a rebate system.

**MR. FERGUSON:** Well, that's an interesting idea.

**COMMISSIONER SHARPLESS:** Why would it drop off? Milk, cheese, raisins, prunes don't.

**MR. FERGUSON:** That's true. Well, if we can get some more money out of the Legislature to support this, whether that's fine.

**COMMISSIONER SHARPLESS:** Well, it's not necessarily getting it out of the Legislature. If you look at the market orders that establish those bills, they

come out of the industry. They self-support themselves.

**MR. FERGUSON:** I would agree. I would think that the industry is going to go in this direction and quite naturally. I don't know about the funding.

**COMMISSIONER SHARPLESS:** Of course as it comes out of the industry, it comes out of the customers.

**MR. FERGUSON:** Right. But I mean in thinking about this in terms of my Sierra Club constituents, we would not be interested in sort of a generic green pool. I opposed that in the Legislature in the conference committee. I do not think it's a good idea. There are certain projects which we think have more merit than others, and we plan to be fairly picky about what we are going to recommend to Sierra Club members' purchase.

As you know, every industry has problems. There's bird problems with the wind industry. There's water sustainability problems with the geothermal industry, and etcetera, etcetera.

And I think when somebody comes to, you know, to the Sierra Club to say, this is green, buy it, they're going to take a fairly hard look. And I think in many cases they may prefer to buy a very efficient gas fired power rather than a project that has a lot of opposition from local environmentalists is not a good project.

So to sort of stir it all into one pot and pretend that it's all the same and just because it's non fossil that it has equal merit is not something that we're going to do.

**PRESIDING COMMISSIONER MOORE:** You paint a case for a lot of different brokers, actually. Sierra Club broker and --

**MR. FERGUSON:** I think there are going to be a lot of market niches, yes.

**PRESIDING COMMISSIONER MOORE:** And brokers on the other side who don't care about some of the externalities or are only interested in a price base.

**MR. FERGUSON:** And all we have in the legislation is sort of the minimal requirements to be certified green and then the market is going to take over from there.

**PRESIDING COMMISSIONER MOORE:** Thank you very much.

Let me turn to Howard Wenger from Solar Energy Industry. Good morning.

**MR. WENGER:** Good morning. Thank you. My name is Howard Wenger, W-e-n-g-e-r. I'm with Pacific Energy Group, Principal.

I'm here in support of the solar energy industry, and I just have a few comments to make with respect to the certification process, especially with respect to small renewable energy systems such as photovoltaics and systems that are owned by customers and on customer premises.

I agree in principle that certification needs to be done, and perhaps it should be done on a kilowatt hour basis as Nancy Rader suggested. But I become a bit concerned when you begin to speak about FERC certification, recertification. When you start to think about hundreds, perhaps thousands of small photovoltaic systems on rooftops that are obtaining funding through the 1890 funds.

So I just wanted to flag that. I feel that perhaps a special category needs to be constructed for small, modular technologies such as photovoltaics. Perhaps this category would be limited to renewable energy systems on customer premises that are below a certain size. Perhaps that size could be a hundred kilowatts.

But the key thing is to keep the costs down for these customers that are making early investments in renewable energy technologies. And so far we've been speaking predominantly about large central station facilities that are not financed directly by customers.

That's the extent of my comments on this issue.

**COMMISSIONER SHARPLESS:** Could I just, the certification for you would be a way to get some 540 money to help market the smaller, or do you feel certification as --

**MR. WENGER:** Correct. Under the emerging category, photovoltaics was the only technology that was explicitly drawn out in the legislation. So, for example, photovoltaics some of the funds from AB 1890 could be directed toward consumers either through a rebate mechanism or through low interest financing to spur private investment in these systems.

So I'm talking about systems perhaps as low as 200 watts in size to

maybe a hundred kilowatts in size for commercial customers.

**COMMISSIONER SHARPLESS:** Well, who would it be certifying?  
The providers of the equipment?

**MR. WENGER:** I think you need to certify, no, well, I think the certification could be done in a simple way where the person or the entity that is purchasing, that owns the system, provides a certification. And if it's a residential customer, say, that's putting a one kilowatt system on their roof, all they have to do is fill out a simple card and perhaps attach an invoice showing, or a bill of sale, and perhaps enclose a photograph of the system to show that it is actually installed.

**PRESIDING COMMISSIONER MOORE:** And they would do that in order to get the rebate?

**MR. WENGER:** Correct.

**PRESIDING COMMISSIONER MOORE:** I see. Okay. And so this rebate would be designed for the consumer to defray the costs of the capital equipment?

**MR. WENGER:** Correct. And we've been exploring, I'm working with the solar energy industry to put together the analytic foundation for some of these, the use of some of these funds, and this is just one of the, photovoltaics is one of several technologies under the solar umbrella. But photovoltaics lends itself best to these small distributed systems where I think many special considerations have to be made, including the certification process.

**PRESIDING COMMISSIONER MOORE:** Okay. Thank you very much.

**MR. WENGER:** Thank you.

**PRESIDING COMMISSIONER MOORE:** Ranji George.

**MR. GEORGE:** My name's Ranji George. I'm with the South Coast Air Quality Management District. I have some brief remarks on the certification process.

As part of the certification process, or at least at the minimum as part of our ranking system, I think some element of technology progress should be insisted upon.

After all, let's face it, the renewable resources are in intensive care and

a shot of oxygen for four years may be able to revive them, maybe make them fit for competition later on, but insistence on technology development along the lines what Vince Schwent yesterday mentioned not to the capital *T*, but with the small *t*, would ensure that at least those providers who are making a genuine effort to improve the technology should be favored upon for these resources so that at least they can withstand the competition once the subsidies are removed.

Secondly, another topic, a related topic, renewable resource providers should be asked to provide a two-page sheet as a standardized format with some standardized information along the lines of MSDS sheets that weigh, let's say, from chemical solvents produced, along those lines, so that if anybody who wants to learn about a particular provider, they can just download from the Web site or ask a 800 number and they can get a two-page sheet.

And instead of very complicated information, certain boxes be marked regarding fuel type, efficiency, and so on. So make it a very simplified format for a third party person to read.

That's all. Thank you.

**COMMISSIONER SHARPLESS:** Municipal solid waste. What is MSDS?

**MR. GEORGE:** It's materials safety data sheet that, let's say, a chemical producer provides with the particular solvents or particular chemicals. So it's a fairly standardized format.

**PRESIDING COMMISSIONER MOORE:** Let me ask you a question. You suggested element of technology progress should be submitted. And can you give us an example, a description of how someone's progress might be illustrated?

**MR. GEORGE:** Before I answer that, I just --

**PRESIDING COMMISSIONER MOORE:** What's the data that you proceed from?

**MR. GEORGE:** Okay. What I would like the Commission is to distinguish those providers who have frozen their technologies 20 years ago, designs that are 20 years, and distinguish them from other providers in the same renewable area, let's say wind technology, who are making some progress, and that

can, it's a subjective element at the point, but at least that can be valued by a panel of experts maybe drawn from ENRON, San Diego [sic] and others utilities who can come to a judgment maybe on the annual submittal rates on whether this progress is being done.

And it is not inclusive, including efficiency improvements, durability improvements, have they, what kind of software controls they have maintained. I mean have they improved on the controls. Have they reduced on the maintenance requirements and so on. I mean there could be a whole list, but again this has to be done by a panel of experts who maybe should be appointed to review this.

For that, at least that you are pushing the technology. You are demanding the resourceful writers do something in return for your investment. This is an investment, not a give away, I hope. That's all.

**COMMISSIONER SHARPLESS:** And you would build that into the certification process?

**MR. GEORGE:** And give them some ranking system. Maybe like we mentioned, we talk a lot about portfolio of mutual funds, and a lot of those stocks are given some kind of ranking based on their credit worthiness. So in the same way you could put some kind of ranking based on the technology progress and their potential to survive the market forces once these four years are over.

You know, I mean I should admit that there's a certain subject of element involved at least from the panel of experts who are evaluating, but at least you should built that in.

**MS. SHAPIRO:** Are you talking about criteria for giving money, or criteria for certifying? It seems to me you're talking about criteria for giving money, and not just being certified as a renewable resource.

**MR. GEORGE:** Well, I don't know whether you can build both issues into the same certification process.

In the sense if one is certified, let's say, I'm thinking of a lesser, well, a particular stock is certified as worthy of purchase but again you could have a class of stock saying, okay, this belongs to A grade. AA being this is showing major technology improvements; the management is showing, you know, good effort to

push the state technology along as opposed to another technology which is still in the 20 year time frame. I mean it's still in the 70's. I mean just off-the-cuff suggestion. But that could be improved upon.

Again, a panel could be convened who could come up with this criteria of evaluating these technology improvements.

**PRESIDING COMMISSIONER MOORE:** Thank you very much.

**MR. GEORGE:** Thanks you.

**PRESIDING COMMISSIONER MOORE:** We're going to break now for lunch until 1:15. We'll come back and reconvene with the continue of review of these items.

[Lunch Recess]

**PRESIDING COMMISSIONER MOORE:** Back from our lunch break and we're going to take up the discussion of renewables again. I'm going to start where I left off. Some of the folks who had put cards in before.

Donald Aitken.

**DR. AITKEN:** Donald Aitken. I'm a Senior Scientist with the Union of Concerned Scientists. And I should have mentioned yesterday that 13,000 of our members live in California and are electric bill paying customers, and so I am their representative in the restructuring process.

When Rich Ferguson mentioned he's talked about his constituency, I, too, have a constituency of a bunch of people who care about what we accomplish and why I'm speaking here.

I was a little bit interested in watching things that I thought were conceptually simple made complicated. Yesterday especially the discussion about new versus old until finally toward the end of the day I think the consensus was that if you haven't built it yet, it's new, and if you've built it, it's old, and life got easier after that.

And today, likewise, I thought we were going to run into some of the same difficulty with regard to defining the renewables that qualify and this 25 percent limit and so on. I thought that was conceptually simple.

But as I began to listen more and more, I'm beginning to realize that



we're really going to have to distinguish very clearly between grandfathering in what's built and what's in the ground and where we go from here.

And the way to do that is to keep the focus on what we're supposed to do with AB 1890. And that is to certainly accomplish building more renewables, and at the same time to really contribute in a dynamic way to the commercialization of those renewables.

There's no question, I'll echo Steve Kelly's comments, that as the 1890 was put together those renewables that have qualified as QFs is everybody's intention that they still qualify, and the rules should be written in such a way that they qualify.

But as we look to where we go with the new renewables trying to maximize the market opportunities, this was the basis of my comment yesterday saying we really have to get off of this 25 percent fossil fuel limit because that doesn't work when you start looking at the economics of some of the renewable electric technologies, especially the solar thermal electric. And here I begin to see the distinction between qualifying those with 25 percent or less fossil fuel that are already in the ground and going from here.

And the focus, really, of the discussion is what does it take to be certified so that you can go after that pot, that \$540 million pot.

And I think, and I've talked to a couple of other people, nobody's heard any particular objection to the idea that as the renewable portion or whatever it is that you're doing ought to be eligible to go after that pot, and you need to write the rules in such a way that that renewable portion has a fair chance to compete for that.

And so you can see a situation where hypothetically let's say I'm a 40-megawatt solar thermal developer, and I have investors, and I'm ready to develop, and I can sell into the pool or I can, you know, I can sell to an aggregator and be part of his portfolio or whatever, but it's pretty expensive stuff, and I may be eligible to go after some of that money in AB 1890.

And if we stay strictly with the QF rules, then somebody else who also wants to compete with me and has 40 megawatts of solar thermal can also build a 50-megawatt plant. And he can have 10 megawatts of fossil fuel as well and go after

the 540 million with a whole 50 megawatts and end up with a plant that can sell the electricity for lower costs than I can.

So already putting in a rule like that begins to skew at where it actually favors the fossil fuel contribution rather than just the pure renewable one being part of an aggregator's portfolio.

And then the final step, as I said, and we just talked about it at lunch, too, and confirmed that the economics of -- again I keep using solar thermal because it's a rather difficult in-between example. I could turn around and my investors could tell me to build a hundred megawatt plant and just have 40 megawatts solar thermal and 60 megawatts fossil fuel. And you'll end up, really, from a market standpoint much better.

And I'm perfectly happy by saying I'll just go after assistance from my 40 megawatts of renewable. But, of course, that doesn't qualify on the QF.

So we have to be very careful in this discussion of whether QF rules lead us to certification or not. Whether we are talking about the new and old. And whether that, the way we interpret those rules, do contribute to the commercialization.

And as I said yesterday, I said the goal was to put more renewables in the ground. I realize that that's not quite correct. It's to put more renewables in the ground while accelerating the commercialization of those renewables.

Now, the final comment I'll make here is I'm aware of the statutory references that are made all the time, but those are always being made back to the definition of the QF qualifications. And I really urge this Commission not to be hamstrung by that. I don't think you are. This is also new legislation that you're dealing with. And you're going to be proposing additional new legislation needed to implement AB 1890. And one of those can be establishing new definitions that go beyond the QF definition for new renewables.

So it's, I guess the summary of what I have been saying is that we find ourselves with different definitions. The past is not the same as the future, and if our goal is to maximize the commercialization potential, we just have got to open up the table in a way that the market can really find the most attractive ways of

pulling that investment capital together and making it happen.

That's really all I have to say at this moment. Any questions?

**COMMISSIONER SHARPLESS:** Yes. I think I would agree with almost everything you said, but I didn't hear how we go about doing it.

**DR. AITKEN:** Well, it depends which "it" you're speaking of now. Getting rid of the 25 percent rule or what?

**COMMISSIONER SHARPLESS:** No, I'm talking about the certification and the caution about what we're attempting to do in terms of opening up the market, growing the market, differentiating between the existing and the new. Would you be willing to put forth a proposal to this Committee?

**DR. AITKEN:** Well, I think better than that. As I think a bunch of us should be getting our heads together on a kind of consensus of how that might be implemented. Because I sense in this group here, I think, opinion that's supportive of this.

In a very simple minded way of answering the question, we're focusing on the renewables portion. We're just focusing on renewables. I mean the moment we focus on the renewables themselves, we're not having a problem of how much fossil fuel is eligible for the money and so on. It's not eligible.

And I think as we begin to simply write the rules for certification that says you are certifying on a kilowatt hour production basis, probably, I'm sure, is how you'd have to do it. And on an average, annual average basis, where you use last year's figures to predict this year's figures, and then you re-adjust them. I'm quite sure that rules like that can come out that can work.

And I guess I'd like to propose to my colleagues in this room that we really do have a serious caucus and try to produce what you're asking for.

**COMMISSIONER SHARPLESS:** I guess I should modify that total agreement somewhat. I'm still not sure about how you deal with the issue of 25 percent.

I agreed with the direction and the philosophy, but I am still concerned, as I expressed to you yesterday, that if you try to establish a system that removes that 25 percent and has some complicated system of trying to differentiate buying a

section of renewables from a bigger fossil fuel type of arrangement, if we just don't get ourselves into a morass.

And one of the things I thought we were attempting to do was to try to, you know, I know markets work when things are well defined and when there's certainty that people can count on in making investments and knowing what they're buying, and the more complicated we get it, the all of our good intentions to grow something fall flat. We've seen it. We've seen how government designs those programs and how they, you know, they sound good, but they just don't work in the market.

**DR. AITKEN:** If I've given the impression that I'm proposing more complicated things, then I'm really not getting my points across. As I sit here, I think I'm doing exactly the opposite.

I certainly agree with Steve Kelly and others who said, and yourself of course, who said that we must go toward simplicity and clarity.

Eric said and reminded us that we meter what comes out of these renewable things. It's no great mystery if you have a hybrid power plant, you know exactly what's coming out of the renewables portion and what's coming out of the fossil fuel portion. So that doesn't add any complexity at all as to measure the renewable kilowatt hours.

So the only complexity is simply: What do you do with those kilowatt hours in terms of certifying for eligibility for the funding. And I think if they're simply defined -- I'm sorry.

**COMMISSIONER SHARPLESS:** But what if you look at the provider's side?

**DR. AITKEN:** I am looking at the provider's side when I say this.

**COMMISSIONER SHARPLESS:** Now, I guess I mean the marketer aggregator side who's, you know, who's combining baskets of renewables to sell to the end user.

**DR. AITKEN:** Yes.

**COMMISSIONER SHARPLESS:** Does it become as simple?

**DR. AITKEN:** I think if you've got -- let me pick any number, 30

megawatt of wind or 30 megawatt of solar thermal or something, and they're clearly renewables, they're metered, you know what's coming out, you buy a portion of that output, which becomes a percentage of your total portfolio, and there you are.

Either I'm terribly naive or it's just not feeling that complicated to me. It's feeling less complicated to me if we keep out trying to keep having a thing like a 25 percent fossil in. The fossil fuel 25 percent requirement is a QF requirement. It deals, it's a FERC thing. And we're moving on.

One thing you've really seen today is that the FERC definition does not work. It is adequate for existing ones, not sufficient for new. That's what you've really heard today. If you just say, okay, we have to back off the FERC definition to promote renewables applications, percentages and portfolios, you've just gotten away from all this complicated of how much fossil do you allow.

And again, remember we're talking about being eligible and certified to tap into the 540 million. That's really all we're talking about right now. And if we just say that the fossil fuels are commercialized, and I don't care how much fossil you use in order to make your renewable project fly, but don't come into the 540 million with a fossil part.

It does seem to me that this is legally amenable. It may require statutory language change, but that's what you're doing out of this.

**COMMISSIONER SHARPLESS:** I'd be willing to review a proposal, but I'm not sold on the concept yet.

I need to have more information. I need to see how this would work. I need to see how really simple this is. You say it's simple; but many people say things are simple, and in reality they turn out not to be so simple.

So and then I'm open to the concept. I just haven't gotten enough information yet to say that I'd buy into that. I don't know about my friend and colleague over here.

**DR. AITKEN:** Well, the purpose of the hearing is, indeed, to put these ideas before you and for you to ask, as you just did, say flush them out, now help us.

**PRESIDING COMMISSIONER MOORE:** Well, I may be a little closer to embracing something like that, but I'm not there yet. And I would suggest that if

you do caucus on that kind of an item, that you bring it back with a definition of what it is that this market would look like and how it would be evaluated. Give us some numbers and examples of how the criteria would work. But I think you're probably on the right track.

**COMMISSIONER SHARPLESS:** But the one thing that I was interested in what you had to say was the certification process itself and dealing with the differentiation between the new and the existing and trying to keep it as simple as we possibly can so that we can grow this industry and not burden it down in duplicative government reporting an over, you know, an over-zealous government review process, but something that will, in fact, protect the industry and protect the consumer.

**DR. AITKEN:** And not burden it with definitions which accidentally constrain what investors would otherwise would like to invest in. That's part of what we're talking about now.

**COMMISSIONER SHARPLESS:** Exactly.

**DR. AITKEN:** All right. Well, that's really all I have.

**PRESIDING COMMISSIONER MOORE:** Vince.

**MR. SCHWENT:** Point of possible clarification.

As we've all discovered, I think this business of definitions get pretty confusing, but when we're talking specifically about the words "certified renewable provider." You do not need, from our reading of the bill, to be a certified renewable provider to be eligible to participate in trying to get a share of the \$540 million.

The only place that we can see in the legislation which that term is used is with regard to the Section 365 that allows if you buy 50 percent of your power from a certified renewable provider you get direct access.

So that is a separate and distinct category. In terms of being able to get access to the \$540 million, the operable definitions there are probably new, existing, emerging and renewables in general, but not certified renewables provider.

I hope that makes a little sense.

**PRESIDING COMMISSIONER MOORE:** Good point. I think in the end what we're going to have to do is draw a map, one of Marwan's famous maps

that graphs between terms. That starts out at a term. I guess I'm thinking of almost like a finement diagram.

Well, they work. I mean let's face it.

**DR. AITKEN:** Yeah, but how many others in this room besides you and me, and I don't know how many other physicists here have been drawing finement diagrams, but.

**PRESIDING COMMISSIONER MOORE:** Well, anyway, a map that graphs terms and shows the term into relationships, it would probably help.

And it seems to me given the kind of discussions that have been going on around the Section 365, isn't it? And the 50 percent versus 25 percent relationships, we might just be helped a lot by a good decent graphic.

I appreciate your comments.

**DR. AITKEN:** I'd add one more thing to the list that Vince just gave you, and that's what Eric put in front of you, and that's project as distinguished from provider, too. And keep that distinction very clearly in your mind.

**PRESIDING COMMISSIONER MOORE:** No, I think that's on the -- we're not dealing with very many that have to undergo this interact. But I think one of the things that's emerging is that it will help us graphically, if you will, just kind of understand where things are going inside the bill.

I hope your caucus works, and we'll look forward.

**DR. AITKEN:** Well, I'm just proposing it happens. And finally you still have a card left over from yesterday where I did want to make just a comment on what the consensus is going to mean among all of us. And perhaps at the end of the day you'd treat that card as to a life.

**PRESIDING COMMISSIONER MOORE:** Why don't you just -- we're almost through the cards, actually. Why don't you tell us what you have in mind?

**DR. AITKEN:** That's just a reminder when you're talking about seeking consensus, and you've already warned people that you are the consensus, that if we can't come to consensus then you shall exercise your judgment because you have to come out with an opinion and a proposal and so on. And the most important thing is to not embrace policy that has the renewables competing against

one another.

And I listened yesterday, and we see that already with the 20 percent kitty out there and people positioning themselves how they're going to go after that undefined 20 percent, but I felt it even more seriously when I saw or heard proposals that can be based on straight kilowatt hour surcharges for renewables as though they're all the same. You kept hearing this yesterday.

And the moment you have a policy like that, you, indeed, have renewables competing against one another which prevents consensus which makes, can really make the whole situation look fragmented and not supported by the renewables community.

And so I would, as you weigh the different proposals coming in, I would also keep in mind the need to have your decision help foster a cohesiveness among the renewables people themselves.

**COMMISSIONER SHARPLESS:** This is a great entree for a question that just kept with me all day yesterday and today. And that is: Do we choose between two approaches?

Yesterday we were given a demand side approach, maybe two demand side approaches, and a supply side approach where you just divide up the money between the four renewable technologies and you figure out what percentage should be in the existing and new and emerging categories, and you say that this is going to get them through the hump until the market price becomes worked out through the restructuring, and that they become more competitive during this four-year period because they know that that's the end of the line for them.

And if they don't, you know, well, so be it.

Or, do you go for this other proposal which is basically you open it up to the market, you let the consumer decide and you don't try to figure out which technology, you know, should be preserved, but you let the market make those decisions. Because if you try to make the decisions, as the proponents say you may make it wrong, and what you really need to do to preserve the renewable industry is to build this market.

Well, both sides say what you really need to do to preserve this



industry is to build the market. Both sides say my proposal does this better. My proposal. It's like a presidential election, right.

**DR. AITKEN:** So you're going to vote for both of them today, is that it?

**COMMISSIONER SHARPLESS:** Vote for the middle party.

**PRESIDING COMMISSIONER MOORE:** It's election day.

**COMMISSIONER SHARPLESS:** And my question is: Is there any possibility of marrying the concepts?

**DR. AITKEN:** Well, yeah, this is a huge question. Just giving my own personal feeling toward this coming into this as I was very much in favor of the producer and just the cleanest thing is divide out the 25 percent, 25 percent. Let the producers of the energy, for example, the wind energy work among itself as to how it's going to be allocated between new and existing and all of that.

I'm aware of the importance of the dynamics of the market again. And I'm aware of the importance of trying to generate a real market development. I played a major role in this concept of sustained orderly development. Wrote some papers on that.

And what I fear is is if it is left just to the market and to aggregators that you can end up with a skewed kind of development which is still heavily influenced by present price rather than declining price. And by present technology rather than by advancing technology. I do fear that.

Whether they can be merged, there have to be some elements that merge them. Even if you end up with 25 percent in each of the technologies and the industry itself helps determine how it's going to have its programs, you still have got real market activities out there and real aggregation and real sales that have to go on.

So by definition there's going to have to be some merger.

But I think you're probably going to have to lean one way or the other, yes, as you come out with policy. I may be really challenged by my friends behind me, but just giving my opinion at this point.

**PRESIDING COMMISSIONER MOORE:** Thank you. We'll look

forward to whatever consensus you can build.

And we're sensitive to the fact that if there is no consensus that emerges out there, that the responsibility will fall up here. And that's not to scare anyone. That's simply to state facts.

To reiterate what I said yesterday, we don't have a lot of time, and we are charged with a very serious responsibility which we take seriously, and we intend to make the recommendations with the benefit of your advice and counsel. That's why we're all here.

Let me turn to Phil Reese.

**MR. REESE:** Good afternoon. My name is Phil Reese. I am speaking at this time as an owner of what is in combination the newest and largest biomass plant in California.

I hadn't planned to say anything today. I'll be very brief. But to Don Aitken, Don, the biomass industry would be absolutely delighted to participate in your consensus. We've taken this consensus concept to heart.

I would like to point out that in that part of Dr. Aitken's testimony which spoke of a generator being part renewable and part fossil, that's an extremely interesting concept. I just have to remind you that all renewables are not equal. And in a mix like that which possibly was created to make the combination economically viable, it might be difficult to determine if the renewable part was above market or below market. And, thus, is it eligible for support funds or not.

We have heard quite a spectrum over the last several working hours of mechanisms to certify green or renewable generators. I'd like to comment that whenever the selfish interests of the generators can be turned to a profitable public purpose here, you should do it.

Nancy Rader mentioned yesterday that self-policing among the renewable generators might be very effective. Well, I think it would be because none of us who really believe we genuinely renewable generators want a scallywag out there claiming to be renewable when he's really not. And we'd be keeping a pretty close eye out to turn him in.

And lastly, probably the most ambitious certification criteria suggestion

was made by Mr. George from the AQMD who wanted to require technological advancement and a panel be convened to score and rank and evaluate whether or not it was being done. That, I think, is going way too far.

Instead, I would remind you that in spite of the fact that I guess all of the renewables are here looking for support and a handout, there is still a very strong, very powerful self-interest called the profit motive to make our projects as efficient and reliable as is possible. Because if you give us a dollar, and we can make our plants run 50 cents cheaper, we just got \$1.50. And we're all pushing to do that.

So don't forget, and, in fact, count on the profit motive among all the renewables. Thanks.

**PRESIDING COMMISSIONER MOORE:** Thank you. Appreciate that. Bud Beebe.

**MR. BEEBE:** Good afternoon. My name is Bub Beebe. I work for the Sacramento Municipal Utility District.

I'd like to speak on two items here. One concerns what I call transaction accounting certification, for lack of another term, and I'd also just like to touch a little bit on our experience with green pricing.

**PRESIDING COMMISSIONER MOORE:** For lack of another more complicated term you mean.

**MR. BEEBE:** Hey, I'm a technical guy. I tend to get these things longer and longer and longer. Sorry.

The issue has to do with the ability to track buyers and sellers through a power pooling market. And let me start off with an example. I have struggled over the last three years to attempt to account for SMUD's greenhouse gas emissions as a part of the president's climate challenge program.

And we do well on those things that SMUD actually generates. If we generate the electricity, we know where it comes from, and we can do fine accounting. But when we buy through a power pool, it becomes very difficult to decide whether we're getting a marginal plant that be a high or a low emitter of greenhouse gases, etcetera.

It becomes a real accounting nightmare and very open to -- "fraud" is

probably the wrong word, but something like that. You just can't tell.

And there are ways, I'm sure, that accounting mechanisms, if they're thought about ahead of time, can be built into the power pooling transaction analysis such that you can track where something is generated and who bought it.

Now, you may not want to do this for everything and may not be possible to do it for everything, but for anybody who steps up to the bar and says that they want their things accounted for, they may well be able to do that.

I think this is an extremely important thing because at the moment you have a faceless electron potentially being bought and sold through a faceless market. And what we need is a venue where a renewable energy project which may have guarantees of let's say 50 percent of its output maybe needing another 50 percent, and if they think they can sell it through the power pool and be recognized as a renewable through the power pool, that may further their project.

I just bring that to you as a thought, and any way that your process can further the introduction of transaction accountability in the power pooling process, I think it will be of great benefit to the renewables projects that are yet to be brought on line.

In terms of green pricing --

**COMMISSIONER SHARPLESS:** May I ask, do you see this as a basically a mechanical thing? Is that what you're talking about?

**MR. BEEBE:** The mechanics of accounting?

**COMMISSIONER SHARPLESS:** Yes, when you talk about transaction accounting process.

**MR. BEEBE:** Yes.

**COMMISSIONER SHARPLESS:** Tracking.

**MR. BEEBE:** Tracking.

**COMMISSIONER SHARPLESS:** A tracking system.

**MR. BEEBE:** Tracking of some sort. Because in the past when you had the vertical integration and firm long-term contracts and so forth you could do a modicum of figuring out who bought your stuff or who you bought from. But in a true power pooling situation, it becomes chaotic, and there's no way.

So that means that if a renewable supplier doesn't have a long-term contract, they couldn't sell into the power pool and get any more than anybody else going into the power pool.

I think it's important in establishing these niche markets which will rely on integrity of market, integrity of the people producing the energy and delivering the energy, that we have some means of tracking it that's trustable.

**COMMISSIONER SHARPLESS:** Do we have any examples? I mean there was a small town in Michigan.

**MR. BEEBE:** Travis City.

**COMMISSIONER SHARPLESS:** Travis City.

**MR. BEEBE:** Travis City is a, I believe they have 7,000 people in their, on 7,000 meters, and they got some 200 people to sign up for the windmill up on the hill. Everybody in town can see the windmill, and that gets us to something else to talk about in a second.

But I think that the accountability issue is easier there because people see the energy, and it obviously is going right into their useful neighborhood, as is our PV pioneer program. People can see that the energy's being produced there, even though their household may not be using it.

But when you try to sell a renewable electron to someone in San Francisco that's produced on the Tehachapi Ridge, it may be more difficult. It may be more difficult.

And I do believe that forethought and pushing this idea that a transaction could be followed through will enhance the viability of some renewable energy projects.

On the issue of green pricing, if I'm -- are we to that point?

**MS. SHAPIRO:** Wait a minute. I'm not. I don't understand what you're talking about.

**MR. BEEBE:** Green pricing?

**MS. SHAPIRO:** No, about having the electrons that go in in Tehachapi be recognizable by somebody in San Francisco.

**PRESIDING COMMISSIONER MOORE:** Oh, you're not talking about

that they're individually recognized. Well, you're talking about an accounting system.

**MR. BEEBE:** That's correct, just an accounting system.

**PRESIDING COMMISSIONER MOORE:** Because this is virtual accounting.

**MR. BEEBE:** That's correct. Virtual accounting. In the sense that you know when the energy was produced, who produced it, and who raised their hand to say that they would buy that energy. That energy, not --

**PRESIDING COMMISSIONER MOORE:** Right. You've got a picture of how much --

**MS. SHAPIRO:** That's accounting. It's not the electrons at all.

**MR. BEEBE:** It's not the electrons at all, that's correct. I like electrons. I've taken them to lunch, but, you know.

**PRESIDING COMMISSIONER MOORE:** It's a surrogate for them. I mean you've just come up with surrogate values.

You know how many went into the grid, you know how many are present energizing the grid at any given moment, and you know how many are accounted for in an extraction at the output points along the grid. So given that you can assign the value or ownership or consumption of the electrons that were green based as they entered the grid, and you can account for how many of them were consumed at the end points at any given point in time.

**MR. BEEBE:** That's right. And time valuing is important here. Because as we all know capacity has a price as well as energy.

**PRESIDING COMMISSIONER MOORE:** Right now, if I'm clear on this, Portland, City of Portland, has a set of contracts for green power that they assume are dedicated to their city. They can't tell whether an electron that comes into the City of Portland actually originated with a green producer or not. They have to depend on a production allocation system that allots those electrons by point of origin.

So in that sense it's really like being able to, the joke among the economists, that there are only really \$20 in the world and the rest is done with

merits by the Federal Reserve Bank, the same thing. You're just accounting for a commodity in virtual space, if you will.

**MR. BEEBE:** That's right.

**PRESIDING COMMISSIONER MOORE:** Does that make it any clearer?

[Laughter]

**MS. SHAPIRO:** But I'm glad to hear he's not talking about the actual electrons.

**PRESIDING COMMISSIONER MOORE:** No, he's not.

**MR. BEEBE:** No, no, not trying to track an electron.

**PRESIDING COMMISSIONER MOORE:** Be tough to brand them.

**COMMISSIONER SHARPLESS:** Color them.

**PRESIDING COMMISSIONER MOORE:** Color them up. I like the idea of coloring them.

I'm sorry, I interrupted.

**MR. BEEBE:** That's okay. Green pricing. SMUD has some experience with green pricing through our PV pioneers program. We spoke a little bit about that yesterday. That PV pioneers program is a very very valuable program. Currently it's reaching about 400 of our 400,000 customers. Not customers, but meters. And that's just not an awful lot in terms of percentage of the total population. But we've reached that without any advertising, no major advertising.

So I think that it's a valuable program. It's been very successful. But still, you have to look to see that it's a relatively small number of people who have been reached with that.

And we're talking with these other green pricing programs of reaching out to a much broader audience I believe. We've got a long ways to go.

Now we do know that three-quarters, maybe two-thirds of the people wouldn't mind spending a little bit more for renewable energy. We certainly have that in surveys we've taken, and we have mentioned yesterday that we'll bring those statistics to you. And we know that the more that you have to pay, the less willing people are to pay for this. So that there's that kind of elasticity in the market.

But we don't have any, I'll say 10 percent of the people or 20 percent of

the people, types of programs out there yet at SMUD. We've been looking at them, and we've done a couple of focus groups recently to try to get some more ideas about what might be successful. And I think it's important in the green pricing mode to mention a couple things.

One thing is people have no idea what green pricing is outside of rooms like this. And even though within our groups we don't seem to have come up with a better term, we've got to get one. Our focus groups, even the ones that we put together that specifically were stacked with people out of environmental groups, couldn't even guess what a green pricing program was.

They certainly recognized that when they went to buy paper towels at the store that some claimed them to be either recyclable or somehow otherwise more environmentally friendly, and they would pay a little bit more for that. That they recognized as additional value. But they didn't know what green pricing was.

And they don't know very much about renewable power either. They understand some of the concepts and they like general ideas, but it's going to take a strong and trusted body to certify what a renewable is or you will have a number of Charlatans out there.

I encourage you to bolster your trustworthiness and be bold. You are the California Energy Commission, and people look up to you as being a provider of truth in these items.

Making sure that you keep your hands unsullied is an important part of this thing. Whether you are going to be directly responsible for certification or not, is immaterial. You're handling the stuff at this point, and it really has to come out looking like you've done the best and most forthright job you can.

I guess that's really all I have to say about the green pricing issue also.

**PRESIDING COMMISSIONER MOORE:** Okay. Just volunteered for a trip to the front or something. Stand up and salute.

Jan, do you have a question?

**COMMISSIONER SHARPLESS:** Well, I guess I'm just kind of left hanging on the green pricing issue. Your advice would be that using the concept of green pricing, really that boils down to, doesn't it, marketing renewables, having a



marketing strategy for renewables?

**MR. BEEBE:** Yes.

**COMMISSIONER SHARPLESS:** That's it. That's green pricing.

And everybody's been stabbing at that issue from different, you know, from a certification to a marketing board to, you know, doing something like the cheese and the raisin industry and so forth and so on.

And so the bottom line here is educating people to renewables and the value of renewables and then how much they would be willing to pay above market price, for instance, for renewables.

But of course, that assumes that maybe all renewables will be above market price, and that's not necessarily a correct assumption. Some will, some won't. And could those that are, people have to understand what additional value they would get from that, I would assume.

But so for green marketing, what advice do you give the Committee? I'm kind of lost. What do we do with what you said?

**MR. BEEBE:** The specific advice is that if a consumer can recognize the product, can see the product and trust that the product has been purchased.

**COMMISSIONER SHARPLESS:** Oh, so we should build windmills in the neighborhood.

**MR. BEEBE:** A windmill in the neighborhood or a photovoltaic on the roof, that's pretty straightforward, and it makes an easy sell. But you can't put windmills in every neighborhood.

**COMMISSIONER SHARPLESS:** You got garbage dumps in every community practically.

**MR. BEEBE:** But you can certify certain renewables through a power pooling process. And a trusted entity that can get behind that certification of the transaction, not certification of is it a renewable or not, I think will go a long ways towards helping a renewable green market.

**COMMISSIONER SHARPLESS:** Oh, so that's the concept I guess I missed. Is the certification of a power pool for renewables. That's your concept.

**MR. BEEBE:** I missed by not informing you better. I'm sorry.

**PRESIDING COMMISSIONER MOORE:** Do you think that the Commission should be involved directly in that kind of marketing, or should we simply sponsor marketing? Should we, in fact, be an underwriter, if you will, of the marketing board that would promote this type of industry?

**MR. BEEBE:** We would not say. We don't believe that that's our say. We do believe that the process or the function is a necessity.

**COMMISSIONER SHARPLESS:** I do recall that there was some discussion at some point even in the August period about a power pool for renewables? And that just kind of drifted off? Is that where that is?

**MR. KELLY:** It's in the bill regarding the clearing house.

**COMMISSIONER SHARPLESS:** Oh, that's where the clearing house, okay.

**PRESIDING COMMISSIONER MOORE:** Thank you very much. Appreciate it.

Howard Wenger. Not here. Gone.

Jody London.

Oh, sorry, I didn't see you. Boy, got to be faster than that.

**MR. WENGER:** Have we moved on to the Number 8?

**PRESIDING COMMISSIONER MOORE:** Things are so muddled at this point we're considering the whole afternoon open at this point.

**MR. WENGER:** Okay, I'd like to go back to the recap of November 4 workshop.

[Laughter]

**MR. WENGER:** Just kidding. Just kidding.

My name is Howard Wenger, Principal Pacific Energy Group here in support of the Solar Energy Industry.

I just wanted to make a few points. There's been a lot of discussion about market base mechanisms for incenting private investment in renewable energy, and I'm in agreement with the other industry representatives who strongly stated that a one-size-fit-all strategy is not going to work.

And I would echo that in saying that I agree with that, but it's not going

to work between renewable energy technologies, but in particular it's not going to work even within the solar energy technologies.

We have a number of technologies within solar including large scale multi-megawatts central station solar trough plants in the desert or power towers in the desert all the way down to small 200-watt photovoltaic systems on customer rooftops. And because of that difference in technology and application within solar, it dictates that we need different types of mechanisms to catalyze the markets for those different technologies and the power produced from those different technologies.

If I go farther to suggest that, and again agree with my colleagues in biomass, geothermal and wind, that we need mechanisms that bridge us to sustainable markets beyond the four-year period. And that the market mechanisms somehow provide that bridge.

And I would strongly urge all of us to put together a plan and a story that we submit -- And I'll be working with the solar energy industry to do that -- that suggests how over a period of time we're going to drive the costs of the technology down, what role the AB 1890 monies are going to have in doing that, what role the AB 1890 monies are going to be used to create the bridge for market beyond the four-year period. I think that should be a requirement for all of the technologies.

I also wanted to go back to this definition about emerging and non-emerging. I know there was a lot of discussion yesterday about that so I beg your indulgence. But it's my opinion that we should let the Staff of the Energy Commission decide what technologies are new, which technologies are old and which are emerging.

Particularly in this area of emerging technologies I agree with Steve Kelly that it also left me a little queasy that the definition of emerging technology, but I think ultimately we should let the Staff of the Energy Commission decide which technologies are emerging and which aren't.

They've been tracking technologies. They understand the economics, the barriers, the markets. They're in the best position to provide an impartial objective statement as to what is emerging and what isn't. And so.

**COMMISSIONER SHARPLESS:** Could I ask a question along that line?

**MR. WENGER:** Sure.

**COMMISSIONER SHARPLESS:** If, in fact, the Staff were to be given that responsibility, what percentage of the money would be set aside for emerging if they were in the process of deciding?

**MR. WENGER:** Wow, I don't have the answer to that.

But I think that it's incumbent upon the industries to have a consensus and develop a consensus on that. There's only one technology that's been explicitly called out as an emerging technology, but I think that it would be useful to know in advance of answering that question what is emerging and what's not emerging. That would help the process.

**COMMISSIONER SHARPLESS:** But would that be a one-shot thing, or would they do that over a period of time? One list that would cover emerging for the one shot of the 540 million, or a moving target?

**MR. WENGER:** That's an excellent question. I think it's something that would have to be, certainly would have to be reviewed over time what is emerging and not emerging as the market and market forces become clearer.

**COMMISSIONER SHARPLESS:** It could be a merging list perhaps.

**MR. WENGER:** Yes. Yes. Yes. But certainly it's something that would be useful in advance now to figure out the appropriation of the funds and how the different technologies can plan and make plans for the market base incentives, actually make markets happen for these emerging technologies. If we don't know what they are in advance, it's going to be difficult to do that.

Also, I'd like to add with respect to emerging technologies that when we talk about them we have to speak about them in the same context as new technologies or new projects. Because we're not talking about one off demonstration projects. When we're talking about emerging technology, it's something that's off the shelf and commercially available but is just above market price to the extent that it hasn't achieved significant penetration in the market.

**COMMISSIONER SHARPLESS:** And which position are you? The

position that it be on the shelf and just not at market price or?

**MR. WENGER:** In terms of the definition of what emerging is? Yes.

**COMMISSIONER SHARPLESS:** Yes what?

**MR. WENGER:** I think it should be that the technologies should be off the shelf. That there should be a sufficient industry infrastructure that is supporting the development of that technology.

**COMMISSIONER SHARPLESS:** Should that be only in California? Someone suggested yesterday that we look at it globally.

**MR. WENGER:** Can you give me a little more detail on that?

**PRESIDING COMMISSIONER MOORE:** They'd be available globally, but in place somewhere.

**MR. WENGER:** I see. That the infrastructure, the technology's available globally?

**COMMISSIONER SHARPLESS:** Um-hum, rather than, say, US or --

**MR. WENGER:** That it'd have to be?

**COMMISSIONER SHARPLESS:** Um-hum.

**MR. WENGER:** I would be in favor of expanding the definition. Although I would suspect if it's available globally, it's going to be available in this country and probably is available in California. But I would be in favor of expanding the definition.

With respect to -- so anyways and when we're talking about the application of emerging technologies, we are talking about new projects, new systems, new markets, so I just don't want us to lose sight of that. When we talk about new projects, we're also talking about emerging technologies because they're going to be, the whole idea is to produce new markets, new projects, new systems, only they're emerging technologies, not an existing or, yeah, not an existing technology.

On consumer education I agree that that's badly needed, sorely needed. I would be in favor of apportioning some of the funds from AB 1890 for that purpose.

I wanted to bring up a point about interconnection, issue of

interconnection to the grid. That that becomes a very significant issue for emerging technologies, such as photovoltaics or small modular technologies like fuel cells and PV.

That the interconnection of these technologies serve as a significant market barrier, I would like to see the report to the Legislature address this issue that fair and reasonable interconnection requirements be available to small distributed systems.

And I'll be a little more specific. If you're talking about a one-kilowatt or 200-watt PV system on a roof paying 500 or \$1,000 to interconnect that system to the grid, poses a significant market barrier. Some utilities have recognized this and have scaled back their requirements for small systems, but these requirements are not uniform. So it would be nice too.

**COMMISSIONER SHARPLESS:** So this would be not so much a financial fix but a regulatory fix.

**MR. WENGER:** Both. Both.

**COMMISSIONER SHARPLESS:** How would it be a financial fix?

**MR. WENGER:** Well, the, when I say a requirement, I'm talking about the equipment that's used to interconnect these systems to the grid. Some utilities require different types of equipment, transfer trip or an isolation transformer that adds a lot of cost to the interconnection of that system. Other utilities don't require these items, and I think that it would have to be --

**PRESIDING COMMISSIONER MOORE:** They supply them then. They don't require them of the consumer, but they supply them.

**MR. WENGER:** No, they don't supply them either. They just say they're not needed. That the equipment that comes with these emerging systems, the power conditioning system itself, has these functions, the protection function's already built into them, so that these added features are not required.

**COMMISSIONER SHARPLESS:** So tell me what you think the fix is again.

**MR. WENGER:** Well, I think the fix is somehow we need to have established an across-the-board interconnection standard and guidelines for

interconnecting to the grid. And how we implement that, I don't really know. Maybe it's through the PUC. But it's something that should be flagged.

It's been, in January of this year there was a net metering law passed for photovoltaic systems, and a significant barrier to these grid connected PV systems is the interconnection of them and the costs associated with them. And some utilities perhaps unknowingly are utilizing the interconnection requirements as a barrier to interconnecting these systems.

**MS. BAKKER:** Where was that law?

**COMMISSIONER SHARPLESS:** Here.

**MR. WENGER:** California.

**MS. BAKKER:** In California? Okay.

**MR. WENGER:** It's required of all electric providers to allow net metering of small photovoltaic systems.

Finally, I'd like to say for small modular systems that are located on customer sites, I would like to classify them as self-generation and have them be -- have the CTC not apply to these systems. Much the same way as energy efficiency improvements are exempt from CTC.

**PRESIDING COMMISSIONER MOORE:** Good. Thank you for your comments. Appreciate it.

**MR. WENGER:** Thank you.

**PRESIDING COMMISSIONER MOORE:** Jody London.

**MS. LONDON:** Good afternoon. I'm Jody London. I am from Working Assets green power today.

Sometimes when I'm with Working Assets I'm wearing my Working Assets long distance hat or my Working Assets credit card hat because we provide a number of consumer products.

For those of you in the audience who aren't familiar with our company, we have 75,000 customers in the State of California and several hundred thousand nationwide. Working Assets green power has the pleasure to be participating currently in the electric retail pilots that are occurring in the states of New Hampshire and Massachusetts.

The New Hampshire pilot actually started selling power to three percent of retail load in New Hampshire in early June. The Massachusetts pilot, which is slightly different from the New Hampshire pilot in that it's only for four towns in the State of Massachusetts, is currently in the middle of a marketing blitz. And power will commence, power transactions will commence January 1, 1997, for a year.

So I want to just draw on some of those experiences and tell you about my observations of what we've been discussing for the past couple of days and kind of where we are.

My first thought is we're way in the trees, and we should step back and think about the forest. And the forest or the goal here is you want to have a competitive renewables market. And then when I think about that I think, okay, competitive renewables market, you need to have the suppliers. I'm not so worried about finding the suppliers because many of them call me every week to tell me they want to sell me green power.

But you also need to have the demand. And you need to think about where is the demand for green power going to come from. And I really believe that it's going to come from residential customers.

And that really should be the focus as you start to design these programs. Is how do you get residential customers involved and interested in purchasing renewables. And I think if you think about it that way a lot of other things will fall out from there.

And I want to stop for a second and explain to you how we go about building a portfolio, at least the way we've done it so far in New England, because I think that will help think about the certification issue.

We go out and we say this is the price that we know we need to offer. This is what the market price is going to be. This is what we think we need to come in at in order to draw customers, and we know who our target customers are.

In these pilots we know the charges that the utilities are going to continue to charge for their transmission and distribution services, and that tends to be about two-thirds of the total bill. So the energy portion is a really small portion of



the total bill.

And then we go out and we build a portfolio. And we look at the resources that we want. In New England we know there are certain resources that we're not comfortable providing in our green portfolio so we arrange to not have them in our portfolio. And we buy unit entitlements in different plants. And so we know we're going to buy, you know, X percentage of the total output from this hydro plant and X percentage of the total output from this natural gas plant. And we know we're going to need some balancing power. It will be a small amount. And you just kind of build your portfolio that way.

And if you think about what an aggregator is going to need in order to say, yeah, I'm providing my customers with a renewable product, I think it leads you to the kilowatt hour certification process.

And it's going to be easier for me when I start talking to someone, when I talk about adding them into our portfolio, to know that they are or are not considered renewable. And then I make my decisions from there on how it's going to affect the rest of the portfolio in the offering that I want to have.

I think initially 01/01/98, yeah, we'll probably just aim for a 50 percent renewable portfolio because we want to take advantage of direct access. But it's completely conceivable that at some point down the road, and a lot of that's going to depend on how the markets develop, we're going to want to have different kinds of products.

Yeah, you can buy a 20 percent renewable product and we'll charge you X. You can buy our 70 percent renewable product and we'll charge you Y. We'll throw in some energy efficiency, I mean, that's what we do. We're an entrepreneur and an aggregator and so that's what, that's what we bring to the market.

The other thing that we're doing in New England is we're disclosing, we're going to disclose to our customers the power that we're using. We're going to tell them over the past six months or 12 months this is the power that we provided to you and these are the sources that it came from.

I don't know that we'll get into telling them which specific plants, although I'm sure if a customer wanted to ask, we would tell them because that's

how we like to do business. We want to be upfront with our customers.

And I don't think it's going to be that hard for us to do. We're working with our power providers, and they are going to be able to show us. And in Massachusetts we've agreed that the pilot administrator that Massachusetts Electric has hired can come in and audit our books to make sure that our claims really are what they are.

There's no label or certification, you know, available right now. So we're kind of making do. But ultimately, we would like to be able to say, yeah, we are a green provider and other people besides us think we're a green provider.

And we don't really want to get into saying, well, this is a good green technology, and that's a bad one. I mean we'll present our portfolio and the market will decide whether they like it or not. That's how these things happen.

Oh, the other thing I wanted to talk about is Commissioner Moore you were asking yesterday about how quickly does a market develop. I mean we, to be quite honest, we didn't think that we would be chosen to participate in the Massachusetts Electric pilot, and then we were. And we put together a marketing program very quickly. Like I would say in a month. And we're signing customers up like crazy.

And the marketing, we're marketing on more than just price. I mean everyone's putting premiums out there, so we're putting some premiums out there, too.

I mean if you want to sign up with us, we'll give you a pint of Ben & Jerry's every month for a year, or you can have some free phone calls. But I mean this is what you get in this kind of market, and those are some opportunities that we're able to make available.

Sounds like some of you would like to buy our power.

[Laughter]

**PRESIDING COMMISSIONER MOORE:** Want the Ben & Jerry's.

**MS. LONDON:** That's right. And they have sorbets. It's nonfat if you're concerned about that.

[Laughter]

**MS. LONDON:** It's part of what I'm saying is you're always going to have customers who are going to want more and more information. And I think you need to view it as sort of peeling an onion. The initial thing the customer is going to want to know is are you renewable. And then you're going to have customers who want to know well how renewable. And which plants. And you can find ways to work through that.

I'm trying to think about, I think those are the main things that I wanted to tell you about. Was just sort of that this is going to happen as it needs to happen. And the more you can have some rules in place ahead of time, that's great.

The other thing is you're going to want to draw suppliers to the market. And if you want to draw suppliers to the market, you need to think about what's going to make it attractive to them. And here I want to echo what many people have already said. You need to keep it simple, and you need to minimize costs.

If you start imposing a new certification requirement at a different agency, that's another regulatory barrier that we have to jump through. And we'll do it because we're committed to this, but not everybody's going to want to do that.

Having formerly been on the Staff of the PUC, I can tell you that they have a certification process in place for a power provider, or they will soon if they don't. But you have to get your certificate of public convenience and necessity, and there might be some ways to build some of the requirements that you're concerned about in there, and then you can have more of a one-stop shop in terms of the regulatory requirements that are needed. And I think it's a great place for the two agencies to come together on that.

And I think I'll stop there, and you may have some questions, Commissioners and Staff.

**COMMISSIONER SHARPLESS:** We heard from the representative from SMUD talk about some of the similar marketing type of mechanisms that they have. Maybe not similar, but at least they're attempting to do similar things. And he talked about transaction accounting. Do you have any comments about transaction accounting and whether or not this would be helpful to your industry?

**MS. LONDON:** I think that it's going to, it's probably going to evolve naturally. Because nobody's going to want to sell me power unlimited. They're going to want to sell me a fixed amount of the power, and I'm going to want to buy a fixed amount of the power. So I think that those mechanisms will come into place because the agreements will be made.

I'm not a technical expert so I don't know if there are technical considerations that you want to consider in terms of having standards in place or something.

But when I think about the issue of the accounting, it sounds to me like the debate going on at the PUC over whether everybody has to have a meter in place or not, you know, a time of use meter, I mean my answer is if it's of value to me as an aggregator that the imbalances between the pool and whatever is going to be so great, I'm going to put the meter in for the customer because it's going to be worthwhile for me.

And I think it's the same issue here. I think because it's a direct transaction and it's a wholesale transaction, everyone's going to be very concerned about knowing exactly what they bought and what they sold.

**COMMISSIONER SHARPLESS:** You make a statement early on in your comments that we were tromping around in the trees and we've lost the forest. Does that comment relate to some of the discussions about our definitions and allocation of money?

**MS. LONDON:** I think so.

**COMMISSIONER SHARPLESS:** How does that relate?

**MS. LONDON:** I think that, I mean from the point of view of a purchaser, I just want to buy a guaranteed, not guaranteed, a recognized renewable product.

I don't, I care to some extent about whether it's new or existing, but in the early stages of this market, I don't think there is, I mean you got to start somewhere. So you're going to start with what's already on line.

**COMMISSIONER SHARPLESS:** How important is price, Jody?

**MS. LONDON:** Price is important. I don't think a customer is going to

want to pay much above five or ten percent above their current electricity bill.

And I can tell you that in these pilot programs, and these are only pilots so I don't think that the prices that we're seeing there are truly reflective of the true market price, people are being told participate in the pilot, you'll save money. And we are selling them a green product that is, their total electricity bill is slightly less than what they're paying today, and they like that.

And when they call us they say: What am I going to pay? Oh, I see, today I pay Mass Electric ten cents per KWH, and with you I'm saving maybe half a cent. That's good.

So people like that part of it.

**COMMISSIONER SHARPLESS:** So it's not just green, but it's cheaper.

**MS. LONDON:** Well, and here you're going to have differences of opinion. And I think it's going to be more valuable to see what the, you know, the polling research shows. I just know that when we think about green power, we think that we're not going to want to offer something that's much above today's current price.

You know, in our phone service, we offer a socially responsible phone service, we price it below what the big carriers provide, they sell it to you at, and we do well that way. And it's important that people know that they're not only making a socially responsible choice, but they're saving money in the process.

I mean I've spoken to people in this room who say, oh, I'm not with you anymore because you were too expensive, and I would encourage you to think about us again because we've altered our prices. But I mean but this is what happens. This is a competitive market.

**COMMISSIONER SHARPLESS:** This is the second commercial, Jody.

[Laughter]

**MS. LONDON:** I know. I'm sorry.

**COMMISSIONER SHARPLESS:** First the Ben & Jerry.

**MS. LONDON:** But this is a competitive market. And this is what happens in the market as you see these kinds of dynamics. But I do think price matters to people.

**COMMISSIONER SHARPLESS:** The last question on New Hampshire and Massachusetts, how many technologies do you offer as being green? What's in the green basket?

**MS. LONDON:** Well, we start by telling people what's not in the green basket, which is no nuclear, no coal, no hydro Quebec.

**COMMISSIONER SHARPLESS:** But you're promoting green, right?

**MS. LONDON:** We're promoting green.

**COMMISSIONER SHARPLESS:** Those aren't considered green, are they?

**MS. LONDON:** No, and we don't promote, we don't include them in our portfolio. We all have these T-shirts at the office that have those three things listed with a big "No" sign on them.

But what we're offering is local hydro power, some landfill gas, some natural gas to balance it out, and then we're hopeful that our demand will be great enough that we will bring in some additional independent hydro. Right now we're purchasing from a system.

**COMMISSIONER SHARPLESS:** So it's basically hydro and landfill gas?

**MS. LONDON:** And natural gas.

**MS. SHAPIRO:** And natural gas.

**COMMISSIONER SHARPLESS:** And natural gas.

**MS. LONDON:** Right. And then we need to have some balancing power. And with the way NePool [phonetic] works it gets a little more complicated in terms of the balancing power.

And we view this as a starting point. We don't view this as the portfolio that we'll offer next year. We fully expect that we're going to continue to negotiate with our supplier to build a portfolio that we're even more comfortable with.

**COMMISSIONER SHARPLESS:** I said last question, so brought up another question. Are there any other renewable technologies, I'm not familiar with New Hampshire and Massachusetts, such as wind, geothermal, probably not,

biomass?

**MS. LONDON:** I really am not certain that all of those are there. I think California has the most diverse market. But I know that there are a lot of PV manufacturers in New England, and they are quite interested in what we're doing.

**DR. AITKEN:** I can answer that.

**COMMISSIONER SHARPLESS:** If you come to the microphone.

**PRESIDING COMMISSIONER MOORE:** Sure, Don. You got to come up to the microphone to answer it.

**DR. AITKEN:** Clearly what they're doing in New England's --

**MS. SHAPIRO:** Identify yourself.

**DR. AITKEN:** Excuse me, this is, again, Donald Aitken of the Union of Concerned Scientists.

Jody, you're doing a fabulous job.

**MS. LONDON:** Oh, thank you.

**DR. AITKEN:** Very entertaining.

They jumped right in, had to start marketing, so they had to start marketing what's there. And the three that she stated are there, they're installed, they're available, you can just buy kilowatt hours right now.

There's substantial amount of wind potential in New Hampshire. There is some in Massachusetts which hasn't been developed. There's a lot of biomass going on generically in New England. If they were in Maine, for example, they certainly would have had much more of a biomass mix than they do.

But this is a case where they had to use existing renewables and just climb in on what they could buy right now. So it doesn't represent the renewable future or the renewable potential of either one of those states.

The Union of Concerned Scientists has finished a comprehensive analysis of renewable potential and economic analysis in Massachusetts. And it's extremely broad, including a surprisingly high potential for PV. But none of that's quite ready for this just jump in, pay five percent, ten percent more, and let's go program.

**PRESIDING COMMISSIONER MOORE:** Thanks. Well, I think it's fair

to say that there are aggregators that will put together packages.

Dr. Aitken talked a little earlier about the idea that some fossil may be combined with renewables in the future. I think it's instructive to look at the airline industry and deregulation there to find that in fact combination of events can produce lower costs overall where people are trying to cut overhead and make sure that the package that they offer, if done big enough, can achieve an economy of scale that can result in a lower overall price.

I think there's no reason to assume that in the future when aggregation starts to occur that the renewables are simply going to be out there on their own. Because if we do, all we're doing is consigning them to a slow death. Make them have to be totally competitive all by themselves.

But in fact, if we imagine a world where they form competitive alliances and/or comparative alliances, if you will, we're going to see some economies of scale, and I think we may see what has heretofore been the unthinkable, and that is that prices go down and get competitive within the time horizon that we're dealing with. So I'm encouraged.

**MS. LONDON:** I have one last thing to say.

**PRESIDING COMMISSIONER MOORE:** Sure.

**MS. LONDON:** Commissioner Sharpless, you were asking earlier about whether the incentive should be on the supply side or the demand side, and I think we would definitely favor putting it on the demand side, because we see that as where you need to build the market. Is you need to have the demand, and then the supply will show up if people see the opportunity.

Thank you.

**PRESIDING COMMISSIONER MOORE:** Thank you.

Marwan?

**MR. MASRI:** I have a comment and a question for Jody.

The comment is we may be mixing here renewable and green. They may not necessarily be the same. And we've seen that Working Assets has natural gas. It's a green, but it's not renewable. And green could be anything that's cleaner than the alternative the customer is buying. So I think it's good to keep that --



**PRESIDING COMMISSIONER MOORE:** Well, renewable may be just a question in that case of scale difference because you put more garbage in the garbage dump you keep creating new gas. It may be slow. But so we want to be technically correct here as well.

**MS. LONDON:** I think you're right, Marwan. I think we are -- I'm not sure that you would call this a completely, I mean you wouldn't call it a completely renewable portfolio, but it's a portfolio that includes cleaner resources than the alternative and a significant proportion of those resources are renewable. So it would hit a, if you were to have a percentage target, it would be a, you know, whatever percentage renewable.

And I don't think you're going to see out the bag 01/01/98 a hundred percent renewable portfolios.

**MR. BAILEY:** And weren't you talking about the notion that you need balancing energy, and you probably wouldn't be getting that from a lot of the renewables, so.

**MS. LONDON:** Part of that is the way which NePool works, which I will leave for another time because it's really not germane here.

**PRESIDING COMMISSIONER MOORE:** That's good.

**MR. MASRI:** I had a question for Jody.

**PRESIDING COMMISSIONER MOORE:** Marwan.

**MR. MASRI:** From your experience, does it really matter from a customer perspective where they actually use electrons from the green portfolio or renewables or that they cause that production to take place? I mean we talk about you cannot, you know, all electrons look the same, but they also, they all do the same thing. They all turn on the lights, no matter where they came from, turn on the cooling or heating system.

**MS. LONDON:** I thought the conversation earlier captured the whole issue very well.

**MR. MASRI:** From your, I mean your customer subscribers, do they care that they actually use the power from the renewable plants?

**MS. LONDON:** There are a few people who care. Those are the calls

that end up coming to me, and then otherwise our customer service reps handle them, because those are the people who know the industry inside and out. And you have to walk through with them that it's hard to differentiate an electron, but you really are directing your dollars at this technology. And it means that that technology runs at the expense of a different technology.

**PRESIDING COMMISSIONER MOORE:** Thanks.

I'm going to have to cut this short and take one more speaker, and then we're going to take a break.

John White.

**MR. WHITE:** Thank you, Commissioner.

As I've thought about these issues over the last couple of days, a couple of things occur to me. And I'd like to frame them both as comments and as a request for information.

I think we need to begin distinguishing between the different purposes of certification. Because I think we're sort of mooshing them together. And I think we sort of have an opportunity to separate them, and I think it may lead to a useful separation of some other issues.

I think we have a quite urgent need to establish the certification process for eligibility for direct access. Mr. Grattan's petition is illustrative.

I also think we're going to need some ability to validate, perhaps sell certification or something, on the renewable label, or the green label, people that are marketing themselves to customers in a fashion where there's an expectation of a certain type of product.

For what it's worth, I think this comment, the last comment about where your money goes, is what's important, as much as affecting the, actually, you know, electrons don't flow, but, you know, the direction of the power is less likely to be directly impacted than the flow of money between the producer and the supplier. I mean the customer and the supplier.

But the certification issue that I think is most urgent is, for the Commission with respect to getting the market ready, is that certification for purposes of the 50 percent direct access. And I think you can do that in a way that is

somewhat different than eligibility to receive funding. And I think that's a separate, much different process.

I think, too, the distinction between new and old, I certainly could regale you of what I think the Legislature meant by that, but as the discussion's sort of evolving, it seems that we're getting a sort of, as Commissioner Sharpless said, a demand side versus supply side, or the money going to the customer versus the money going to the producer.

And it may be that what we need to think of is market based incentives. Where you're going to let the market and the customer choose the technologies versus project specific support. And there are both new and existing applicants for the project specific support.

And I would suggest that we envision probably a different level of scrutiny being needed on projects specific support as opposed to market based incentives.

I think that my own view is that the people who are going to the market and are trying to get customer incentives and are going to basically be working it out between the suppliers or the utilities and the customers are really talking about developing a premium product. And they are going to have a lot of obstacles to overcome and need to be able to get to the market and not have to go through an Energy Commission siting process to be judged appropriate.

I think, however, for a specific project is seeking specific amount of support either supplemental payments after they reach the cliff or low interest loans for new projects or other kinds of support for new technologies that invariably you're going to have to scrutinize those claims and evaluate them one against the other.

And I think that you could have technology bands, but I still think you're going to have to develop some criteria for the project specific-type support because there's going to be different claims, and they're going to all have different degrees of merit. I think that if you don't make a separation like that, then you're going to condemn the people that are trying to get into the market to basically wait for an allocation process that may take longer than the time that is available to build

the market.

I think, too, that we need to, I am anxious to hear the results of the pending negotiations among the technologies, but I think we have to look at this somewhat like we might a legislative reapportionment plan, and I think you all are the masters.

The incumbent generators, I think, have a great desire to divide up the money themselves; but I think your job is going to be to weigh those allocations against the relative merits of alternatives and against the public benefit. And I don't think you can escape that responsibility, although I do think there is virtue in having some assurances that we maintain diversity.

But I just think that there's going to have to be a separate process that says, well, now what is the gain that we're making.

For example, in a case of biomass, there are a number of technologies, not now, potentially, but not present as an existing generators who may well offer potential uses of biomass in terms of landfill gas, fuel cells, different things like that. So I mean you can say that one technology wants all the money for existing, but says who, you know. How do we determine that the appropriate allocation within a particular industry is to the incumbent generators versus all of it going to.

So I think that's one of the concerns I think you're going to have to weigh. And I think you're going to need some data to do this.

And so one of my suggestions is that since at some point you're going to have to weigh the public benefits of the different technologies, I think we need to begin assembling the database that I think you already have through the ER process to at least get an emissions profile of particularly the combustion technologies because I think you're going to have to weigh the air quality impacts of some of these technologies against your other public benefits.

And I think that this is data that would be illustrative, not so much to disqualify a particular realm, but to weigh, I think at some point you're going to have to weigh the claims of the public benefits that arise. And I think that it's going to be part of the customer information to assemble that.

Lastly, on the issue of customer information, I mentioned this

yesterday that I think the power exchange and the utility operations are going to together have to have better information available to the customers. One of the problems I think may arise if you have new requirements placed on the generators or the suppliers, my experience with this issue and the Legislature is that those new requirements will be resisted.

So one of the things that I think the Commission might serve as an available vehicle for is gathering first what existing information we have. I believe there's a substantial amount of information sent to EPA through the continuous emission monitoring system that allows you to report NOx and carbon emissions, both, from existing generators. It might be that the Commission could help develop a label or some mechanism.

I think one of the things we're going to fight is a tendency to want more information than the customer may need, and we got to be careful that we don't over burden it. But I think we do specifically need the ability to differentiate between the products that the customer is having available.

I think that the customer is, in fact -- the key to the green marketing issue, I think is something that the SMUD representative indicated is the certainty that people are getting what they're paying for, and I think that comes sort of two ways. One, the survey data that I'm most familiar with is geared towards people being sure that their money's going to a technology that is, in fact, what it says it is. I think that matters more than where the kilowatts are actually coming from.

But I also think the customer, part of what the customer's doing is not just choosing a premium, but the customer's hopefully going to choose to direct the energy portion of their bill to a particular kind of supplier and paying a premium for that privilege. So I think that's the transaction that's most important, and a certain amount of customer information is going to be needed.

And I think, you know, maybe this difference between the supply side and demand side, you know, maybe we have to recognize that different suppliers, different marketers, have different visions. You know, I think one segment --

**COMMISSIONER SHARPLESS:** What? Vision?

**MR. WHITE:** Vision. I think one, or prison, you know, we're all imprisoned by our biases.

And I think one segment is trying to get subsidies and support to make renewables fit under the pool price. And so be able to get the price down low enough to fit under the pool. And that's a strategy rooted in sort of where we've been.

I think at least others are interested in premium bilateral relationships between suppliers and customers that don't involve the pool. Renewables are too valuable in my mind to just waste them in the pool.

Now, unfortunately, there's a great deal more uncertainty in the bilateral unbundled, you know, generation market, but I think that market is potentially quite large. And so I don't think we can resolve, I think there's this people tend to come out on one side or the other of that.

And it may be that in the foreseeable transition we're going to have to try to do both. We're going to have to try to do enough customer incentives to allow that market to reach critical mass and take off on its own and be what everybody lives on after the four years.

But I sense that there is also a great deal of desire for project specific support to try to squeeze under the pool. And, of course, we have less money than we would like to have. But I think that it's in that separation, and I think both need attention.

I'm not, I tend to see myself more interested in the customer side just because I think that's where the potential is is untapped to the greatest, but I think your responsibility's probably to keep your eye on both. Because I think there are claimants to both that have merit.

But I think we need to not let the particularly the market based certification customer information and customer incentive issues be delayed to the point of having everything resolved on the supplier base side, because I think there is some time urgency to the former.

**COMMISSIONER SHARPLESS:** And that's the issue of putting together a certification process.

**MR. WHITE:** You know, it may be in certain situations that the 50 percent direct access where you are blending renewables. I think Commissioner Moore's comment about the blending of the products is very much on point. There are power marketers more interested in renewables now simply because of that requirement without regard to incentives, without regard to anything else. And at a minimum, we need to be ready for that to be done.

I mean, the PUC, for example, I hope will not hear from the Commission here that it's so complicated and so difficult, so time consuming, we need so much data to be able to certify renewable provider, that we won't be ready by the time we get to 01/01/98 with a definition.

**COMMISSIONER SHARPLESS:** I haven't heard anybody really trying to complicate the system so much.

**MR. WHITE:** No, but the PUC --

**COMMISSIONER SHARPLESS:** But there's a tendency to want --

**MR. WHITE:** Well, potentially the PUC has to be encouraged to move on that 50 percent direct access and make that available.

I also think that this Commission in its leadership role needs to facilitate and assist the freeing up of market access for renewable providers on issues like unbundling and being part of the power exchange.

One of the critical issues in the power exchange and the pool is the environmental information being included. So I think, I hope that both of these visions can, you know, not so much compete with each other as be allowed to develop. I just think that you got to recognize that part of the dissonance that is somewhat still present is a function of two different visions, and I think our job is maybe to try to synthesize or at least get a piece of each together.

**COMMISSIONER SHARPLESS:** Well, you've given us a very strong flavor. It's the ingredients that I just kind of would like to pursue with you.

It sounds to me like you're seeing in order to build this market a need maybe you said for some technology bands.

**MR. WHITE:** Well, I would not be an advocate of it, but I'm hearing a lot about it, so.

**COMMISSIONER SHARPLESS:** Yeah. So translated, it's setting, as some have said, the concern about the need to provide some money for sustainability of the diversity of technologies while building the market. So it's a blending of the supply and the demand side.

**MR. WHITE:** I think you could have a customer based program that still had, you know, technology bands in it.

**COMMISSIONER SHARPLESS:** Ah-hah. Have you got such a proposal in your hip pocket?

**MR. WHITE:** Well, no, yeah, I mean, see I think there's two different, there's three different splits, okay. There's new versus existing, there's customer versus project specific, and then there's bilateral versus pool. And I think those are the divisions, and there's some cross pollination, but I think --

**COMMISSIONER SHARPLESS:** Splits for what? Splits for money? Or splits for?

**MR. WHITE:** Yeah, splits for money, and splits of, you know, where the interest of suppliers is.

**COMMISSIONER SHARPLESS:** If you've got this 40/40 though that has to go for existing and new/emerging, and you overlay the three splits that you've got, you've got some complicated mathematics to figure out how you'll conform to the 40/40 and still do the three-way split that you're suggesting. Is that not correct, or am I just not getting it?

**MR. WHITE:** No, I believe that the split between existing and new is quite important, but I think there is some interest on the part of some of the folks interested in new to work on customer incentives. I think you could do customer incentives for existing projects, too.

And one of the things that was talked about earlier is the CTC credit for buy outs going to the customers. You know, I think, you know customer incentives could be done for both existing and new projects. And I think there's going to be an interest in doing that.

I'm just trying to illustrate why there is sort of a different, you know, sort of people that are generally in agreement have sort of different visions. I think



it's partly because some people aren't sure the market's going to be able to be done for them. And they want to, well, if the money's here, let's get the money at least.

I think that the problem with the money is there's not enough and it runs out, and that ultimately the customer based market is the one that has the potential to grow. I think, and to be leveraged. I think the real problem that everybody has is since we need more money than there is, how do we get leverage for the money that we have.

**COMMISSIONER SHARPLESS:** Could I go to the next step then? You've talked about one band, which is the project specific. So you've got some money over here that's going to certain types of technology, say for instance, and now you're saying that the Energy Commission should look at the projects within that technology band to see whether they meet yet another set of tests.

**MR. WHITE:** I'm not actually trying to make it that complicated. But I think that a project specific allocation, by definition, means scrutiny and political review of the request.

**COMMISSIONER SHARPLESS:** Of all of the projects within a technology band.

**MR. WHITE:** Within, if you're getting money for specific projects, I mean you can call it something else, but you really, you know, you're presuming that there's a need or that there's some justice to be served by giving that compared to doing something else with it. Now it could be that you could, you know, let the industries do that, but I sense that that's going to be difficult.

So what I was trying to argue for is just a recognition. I'm not sure I want to develop a criteria so much as a recognition of the different claimants and different visions that are out there, and they're not just old and new. Okay, because there's some of the emerging technologies, and some of the interest in new who want what amounts to project specific support. And I think those are going to require some review.

Whereas, I think if you were in a market base situation, what you need is light-handed certification so that you validate the claims since you're not, you know, the customer is getting the money; it's less intrusive. Now, people may want

to have a validation process for that, but I see there being some urgency to being able to get out into the market.

When we were in the Legislature, I was, at one point, willing to say, okay, 40 percent of the money can go to new through customer incentives, 60 percent can go to existing, even though my interest is in new I thought if you could create certainty to get out in the market and get going and start building portfolios and working with marketers and, you know, having something available for customers, that it would be worth it to take less.

On the other hand, people said, well, why do you want to give less, you know, you should have more for new. And I think part of the problem is that there is a different burden to be expected when a specific project is getting money and when you are letting the market make the allocation.

**COMMISSIONER SHARPLESS:** Okay. One last question, and that has yet to the next level of specificity.

You've indicated to the Committee that in order to get ready for that process that we might have some information already available in our own databases that deals with emissions from facilities? I'm thinking that maybe -- two problems there.

One, some of our information might be based on aggregates; and, two, some of our information may be based on certain threshold levels that we may not have, although I don't know, ELFIN model, how that whole thing flushes that.

Does Staff have a comment on that?

**MR. MASRI:** I think you're right. But my guess is although it's another division has that data, I did work it the one time. That's on a technology basis most of the information we have. It's not on a project by project basis. So you may say, well, the average emissions for biomass from each kilowatt hour is this, but --

**MR. WHITE:** Well, I raise this because there were some statements made yesterday about the biomass technology has more public benefits than any of the others, and I believe that's a proposition that ought to be subject to some further discussion. Because I believe that one of the consequences of that statement is a

fairly generous interpretation on the emissions data and that has to be balanced against the benefits gained from both landfill diversion and ag burning forgiveness.

And that if we're going to have it emerge that this technology band gets the most money because of this statement about how beneficial the technology is, there needs to be, I think, some opportunity to discuss whether that's, in fact, true. Or what the basis of it is. Because, you know, on a megawatt hour basis I think, you know, biomass is up there with coal in terms of its, you know, criteria pollutants.

So, you know that has to be judged against the field emissions foregone in ag burning and the landfill diversion. But if, in fact, we're going to say as a matter of public policy that there is this much more benefit to biomass that therefore justifies I'm getting, you know, a third of the money, then I think that ought to be subject to some scrutiny. Compared to what? Compared to geothermal and wind and solar.

And, you know, this is hazardous slippery slope and nobody's going to find it pleasant to, you know, have a little, you know, due diligence done. But I would argue that to the extent you're going to ask for an allocation based on public policy as opposed to an allocation based on the market, that there is some due diligence required on the part of this body to validate those claims. Or it just becomes like reapportionment where you let the generators divide up the money and we'll just assume that's a proxy for public benefit.

**COMMISSIONER SHARPLESS:** Well, that was one of the questions on our agenda yesterday which was the allocation criteria and the allocation mechanism, and we really didn't get much comment on it. But I think that the issues that you're raising today are issues that have occurred to the Committee.

And I do think that Commissioner Moore and I do expect that type of expectation, or we have an expectation that that type of information will come along with any type of consensus proposal that would be provided to the Committee. Is that?

**PRESIDING COMMISSIONER MOORE:** Any kind of consensus proposal that's likely to be accepted. A lot of consensus proposals might come forward, but there's a threshold there that they'd have to, we're expecting that kind

of response. I think that's a reasonable request.

Yes, Vince.

**MR. SCHWENT:** Commissioner Sharpless' questions have triggered a couple in my own mind.

You've seemed to testify, John, that you think that giving the money to the suppliers causes some degree of complexity and requires some greater burden on the part of the Commission to make sure that that money has been wisely and properly spent.

But I guess I don't immediately grasp why that isn't also the case if you put the money on the demand side. I mean you'd have to have some process, wouldn't you, to decide which aggregators, which marketers, got what portions of the rebates. And if they didn't use them, how you get the unused part back, and how you keep them from over bidding or accountability to make sure that it got to the customers.

You wouldn't have to do any of that?

**MR. WHITE:** I think the assurance you have that it gets to the customer, the assurance that the people are doing what they say they're doing, are the paramount concerns.

I don't think that the eligibility, the application process or any of that stuff would necessarily apply. I think that's why it will be unlikely to be the sole source of the money.

But I think to the extent that you are going to rely on customers and suppliers to get together and you're going to incent the customers as the primary financial support, then I think that's one of the reasons I think it's attractive. Is that I think you could then argue for less scrutiny and oversight and political administration of the funds.

I think, on the other hand, where you're getting project specific or supplier based claims, old or new, emerging or existing, the claimant necessarily will have some scrutiny to go through, just for the simple reason that there's scarcity. There's not an unlimited amount of money, and there will not be, I don't think, enough money for all of the applicants for new and existing project specific support

to be accommodated.

**MR. SCHWENT:** I guess it's not immediately clear why that same wouldn't apply to giving it into the customers' hands in terms of scarcity.

**MR. WHITE:** Because I think in the case of the customers you could do it on a basis of first come/first serve. And you probably could even live with the technology allocation within that.

I mean, if for example, the wind guys would get all the customer incentive money because they're the cheapest technology, or that one geothermal plant might get it all. You know, you could put criteria on the customer incentive side without having to go through a siting process or some other validation process to, you know, to have the money flow.

**MR. SCHWENT:** But that does raise the other question.

You mentioned that let consumers choose the technologies by where they spend their dollars. And I know Jody talked about consumers wanting to just buy a renewable product. They didn't want to pay more than five to ten percent more than otherwise the cost of non-renewable energy. How do you see different technologies fairing in that marketplace if you've got some technologies like wind and geothermal that are a nickel and others, biomass and solar thermal, that are a couple pennies higher and others emerging technologies that are still substantially higher. How are those more expensive technologies going to be able to compete where the customer's going to choose? Aren't they just going to be large dominated by whatever's the lowest cost way to buy renewables?

**MR. WHITE:** They could be, although I happen to agree with Professor Ferguson that the solar technologies probably have the best market support. People probably pay the most for the cleanest or for solar.

That's why politically I think you'll end up with not all the money going to customer incentives. I also think in the case, but you could have within the customer incentive, you could have a PV band, for example. And have the PV money come out the door in the form of customer rebates that still allows the customer to be the ultimate determinate.

I think my concern is that long term, the most sure option for building

a future for this industry until we realign our public policy in a manner that was more reflective of the needs that I think we truly have.

You know, we had a wonderful BRPU, a wonderful externalities, life cycle cost cases put on in this very building, and we got zero megawatts for it.

I feel that getting the customer in touch with the supplier and empowering that customer to be able to direct that 30 percent of their bill to the green supplier with a premium is a better venue for building a growth sector than sitting around and administering a small pot of money on specific projects. And so I would rather have at least a healthy chunk of this dough be for that purpose.

I could be wrong, and we'll see. And if we're wrong, we're probably all screwed.

[Laughter]

**MR. WHITE:** But on the other hand, I understand that that proposition has to be tested, but I think because it is difficult proposition, it needs to get tested quickly.

And I also think that there are enough constituencies that are wanting to try to fit under the pool and not be out there in the brave new world that that constituency or that group of constituencies is going to have its presence felt.

It just strikes me that the two visions, while somewhat competing, both need to be flushed out and worked on. And maybe if we keep them as separate they can mature and flower and develop in a way that will work for both.

**PRESIDING COMMISSIONER MOORE:** All right. I'm going to wrap this up. And thank you, Mr. White.

And we're going to take a break for 10 minutes. Convene back here at 3:30.

[Recess]

**PRESIDING COMMISSIONER MOORE:** Can I ask everyone to come back in. Especially anyone who has the slightest suspicion they might still be called on in class today for answers.

Okay. George Wagner. Is George Wagner here? Negative.

Nancy, you had on your card that you wanted to speak on the last item.

Do you have more that you'd like to add to the hearings?

**MS. RADER:** Not now.

**PRESIDING COMMISSIONER MOORE:** Thank you.

Steve Kelly, do you want to add any more?

**MR. KELLY:** Steven Kelly with Independent Energy Producers. I'll try to keep this very brief, but I would like to add kind of some summary comments based on the previous discussions that I've heard today. And it is just kind of a reminder to the Commission about the schedule under which we operate.

I've heard a lot of different discussions about methodologies for addressing the allocation issue, particularly yesterday, again today, and mechanisms to potentially evaluate and compare projects which were seem to be indicating that we would be leading down a path of multiple hearings, multiple testimony and that kind of detail which, from my perspective, is quite complicated and potentially very long process and may not conclude within this millennium if we got into too great detail.

And I just wanted to remind the Commission that, you know, that if we're lucky we will have, in addition to having the joint recommendation coming out in March, it's expected that the Legislature will have to have some say or do something to implement some of the provisions that are before them. And in the worst case scenario that might not occur until August.

And I suspect that most of the work in developing these mechanisms is not going to occur until the Legislature acts, which would leave us, if we wanted a start date of January 1, '98, of a couple of months to figure out a lot of this stuff.

And I just wanted to remind the Commission that's not a lot of time. So as we move forward, as IEP had stated at the beginning of this hearing process, one was a simplicity so that we could have up and running some of the features and market mechanisms as of 01/01/98, so that the renewable industry can take it, and the consumers, can take advantage of them.

**PRESIDING COMMISSIONER MOORE:** Well, let me just say that there's no intention on the part of this Committee to delay things in such a way that we won't get done.

We're under a production deadline that's going to have us starting to put things out to our own Commission in mid January. And we have every intention of producing a system that, if it's not fully flushed out, at least it's something that the Legislature's not going to have to re-invent, and that the only thing we hope will be left at the end is the fine tuning to make it work.

So our sense in our discussions privately on this is that we'll produce a product that will have a broad consensus. That's our objective. And that is workable and accomplishes the objectives of 1890. And that is doable by March 31, the day that we hand our report in.

Frankly, I know what you're saying about the complexity of the workshop and then hearing format. Frankly, you're working with two Commissioners who had to come up to speed pretty fast on this who didn't have a lot of grounding in it, hadn't been working on the committees that dealt with it in the past. And so in a sense what we have done is to acquire, what we've used you to collectively to refresh your own memories about what's going on and to get us up to speed at the same time. So you've been providing an education for us.

I think that the next set of forums will begin to focus pretty clearly. And by the time we get done with the hearings in December, you'll know where we're going. There won't be any question about it. We'll be pretty focused and hopefully exhibiting and reflecting the kind of consensus that gets developed in the outside.

Jan.

**COMMISSIONER SHARPLESS:** I would agree with what Michal said, but I heard a sort of two levels of concern in your statement here.

The first would be let's make sure that we don't miss what we need to do by March 31. And also, whatever mechanism we come up with recommending in March 31 is not such a complicated structure to build that once it gets approval it's going to take enormous amounts of time to get there.

**MR. KELLY:** That's my greater concern actually.

**COMMISSIONER SHARPLESS:** And I hear that, but I would just say back at you that I think that depends on the parties. The parties are going to be the



ones who help design this machine to make it work. And you all have an enormous stake in making this thing work.

What we need to do is we need to take the best of the concepts and ideas that we've heard today and to marry them together in such a way that we have a proposal to the Legislature that isn't overly complicated but that deal with some of the real public policy issues.

And either you all can make it so complicated that we all lose, or we can get down to the business of really dealing with some of these issues and resolve some of them for the Legislature so that it is a fairly clean process.

I do believe that there's going to be work to be done after March 31st, but if we all have sort of a clear concept of what it is, it's going to be easier to get done.

**MR. KELLY:** Right. I agree, and we fully intend to work with you on this and help through this process.

**PRESIDING COMMISSIONER MOORE:** Good. Thank you.

Bob Judd.

**MR. JUDD:** Thank you, Mr. Chairman. My name is Bob Judd from the California Biomass Energy Alliance. I'd like to make just a few observations, some of which I had hoped to make have been made.

I'd like to offer a comment on green marketing. I expressed yesterday that the biomass industry is interested in seeing green marketing work. We feel that it is most effective for existing projects because of the contractual obligations that existing projects have where they essentially have to sell to the investor owned utilities.

I'd encourage the Commission, I'd encourage all of us, to approach it, though, with a skeptical optimism. There seems to be an air of hysterical acceptance of very limited survey data to date. I think we would all benefit from a better understanding of the quality of existing data that has been put forth by various parties about the readiness or willingness of a large number of consumers, a random sample of consumers, to respond to green marketing techniques.

We hope they work as much as anyone else does, but I would caution

against the presumption that if you build it, they will come.

It leads me to recommend a thoughtful sequence phased in professional market test of green marketing before significant amounts of money, tens of millions of dollars, are committed to something that is not demonstrated to be valid.

Just as one would test market a new product, just as the California Almond Board did before they decided on their ad campaign, they test marketed it. They professionally assessed the quality of the data they got.

I would just encourage that. Not in the least discouraging green marketing. We're willing to contribute to green marketing and to see it work. But let's make sure it's done on a solid footing rather than on a basis of wishful thinking or misinterpretation of inconclusive survey data that may be out there now.

**MR. HUFFAKER:** I just wanted to ask what do you think is a proper role of government in this test market? And what is the proper role of industry? Do you want government to do some kind of market research, or do you want government to provide funding for it, or bring the industry together and facilitate a collaborative, or what do you want them to do?

**MR. JUDD:** Bob, I would actually defer a response to that question to those who are going to be more deeply involved from the industry side or from the private sector side on green marketing. They know more than I do on that.

There certainly could be a collaborative public/private partnership on how to get this rolling on a sound basis.

My caution is to simply try to get it so -- make sure your data is good. Make sure that there are not a number of false assumptions in this that could lead you to misinvest, under invest or over invest in a green marketing program. Pretty straight marketing.

**PRESIDING COMMISSIONER MOORE:** Jan.

**COMMISSIONER SHARPLESS:** What does green marketing mean to you?

**MR. JUDD:** Well --

**COMMISSIONER SHARPLESS:** I mean we've already -- is it whether

or not aggregators and whether or not aggregators or others in that field, brokers, would be able to put such a market together? Whether or not the 50 percent direct access is going to be an incentive. Whether or not we have CTC rebates that will help grow that industry. What does green marketing mean to you?

Because there's, you know, it's a term that everybody uses, but it encompasses so many things. And so when you talk about pilot testing, you could do something like what Jody's Working Assets are doing and ignore all of the other ancillary options that might go to help green marketing work in the early years to grow the industry.

And as somebody who's part of the biomass industry and would be concerned about wanting to be a part of that green market, to me the question would not be "Does it work?" but the question would be "How do we make it work?"

And if the emphasis of the program was putting something together on how to make it work rather than an issue of more studies on whether it works, then, you know, I don't know which direction you think it's going to go, but I hope it's the latter rather than the former. I hope you're not, you know, suggesting that we don't know green marketing may be a value to this industry.

**MR. JUDD:** No, I, perhaps, over generalized.

What I was suggesting is that if there were any portion of the funds allocated by the Legislature that would be used for generic marketing of renewables as an educational tool to the general public, that targeting that to make sure that that has the most bang for the buck. Dollars that renewables may give up to encourage something like that. It should be targeted and effective.

I had no comment to make whatsoever about what Working Assets or other private companies may do or how they go about it. I was talking strictly about these funds that have been the subject of our meeting and if a portion is used to use it effectively.

**COMMISSIONER SHARPLESS:** I guess by extension you would be applying that to proposals like EDF? Your concern, is EDF, in your mind, sort of an extension of green marketing?

**MR. JUDD:** Oh, in a sense it is, but I guess I'm a little in the comments

that I have made I'm actually a bit more focused on the consumer education side of it to make sure that the message gets most effectively to the perspective buyers. Whether it's the outcome of an auction process or a direct access marketing program that others may do.

**COMMISSIONER SHARPLESS:** I see.

**PRESIDING COMMISSIONER MOORE:** Thank you. Appreciate your comments.

Traci, did you have other things you wanted to add?

**MS. BONE:** Actually, yes, I do. So thank you for inviting me back up. Again, this is Traci Bone for Oxbow Power Group.

And since I started out the comments this morning, I've been corrected quite a bit. And happily.

What I would say at this point is that I believe that Oxbow would be very willing to stand by the suggestion that was made, for example, by Steve Kelly talking about what the drafters of 1890 meant when they were coming up with the renewables program in that to the extent that someone is certificated as a QF, then they would receive CEC certification. And I think Oxbow is very comfortable with that kind of a procedure.

And to the extent that the Commission needs to develop alternative certification procedures for other people that aren't interested in seeking FERC certification or can't achieve the requirements for FERC certification, then the CEC would come up with a procedure to handle those people.

Does anybody have any further questions?

**PRESIDING COMMISSIONER MOORE:** No, but it's encouraging to hear someone step up to the plate and say that.

**MS. BONE:** Oh, thank you very much.

**PRESIDING COMMISSIONER MOORE:** Thank you.

Jay Morse, still here?

**MR. MORSE:** Thank you, Mr. Chairman. My name is Jay Morse, J-a-y, M-o-r-s-e, with the Public Utilities Commission's Office of Ratepayer Advocates.

I'd like to start out a little bit by acknowledging that several of my

predecessors up here have talked about their constituents, their clients, and how many they have. We represent all the ratepayers of IOUs in the state, so I think we can trump that.

I wanted to briefly follow up on several points. One was that there was some questions about how to certify green power coming through a power exchange. My response to that would be basically don't worry about it.

One reason is that if the Public Utilities Commission were looking at implementation of direct access on 01/01/98, regardless of whether the power exchange is ready to roll on that date or not, the Commission is very interested in being able to implement direct access and have contingencies for it in the event that some of the market mechanisms that have been posited are not yet ready to roll at that date.

Another is, as you noted earlier, there are some questions about how to account for the color of the electrons going through the power exchange.

And a third, frankly, is that since the ability to denote the percentage of renewables in a portfolio is so important for green direct access, please don't hold up the accounting of that or the certification of that by waiting for the power exchange to come on line.

As they say in those Nike ads, "Just do it."

I'd also like to follow up comments that several people raised. Nancy Rader and a couple of others about the idea of identifying not only the proportion of renewables within the portfolio, but also the breakdown of renewables within the portfolio.

One reason for doing this is that it will make it possible to find out if, in fact, there are different market niches for different renewables. It may be that different renewables at different price levels do have appeal in different market niches. We won't find that out unless that information is made available to the customers.

Third point I'd like to raise, I think this is a follow up to comments by Howard Wenger who I think probably isn't here anymore, he was talking about incentives for rooftop PV. Another way the rooftop PV can factor into this is if it is,

for example, rooftop PV is provided by a direct access provider, that it should be possible for that provider to count that system toward meeting the 50 percent goal to getting the customer able to have quick access to the direct access market.

There were also questions about net metering. I would just, you know, and where that came from and what that is. And I would just say very briefly that that Section 20- 2827 of the Public Utilities Code.

And that's all I have for now.

**PRESIDING COMMISSIONER MOORE:** Marwan.

**MR. MASRI:** Jay, 01/01/98, direct access you were saying would be ready to roll. No phase in? Is that the intention? Because the provision AB 1890, it says --

**MR. MORSE:** Right.

**MR. MASRI:** -- exemption from phase in.

**MR. MORSE:** Right.

**MR. MASRI:** So if there is no phase in, is there a red herring then?

**MR. MORSE:** No. Yeah, I didn't mention the phase in provision.

There actually has been discussion in direct access limitation workshops about the possibility of having immediate access to direct access for all customers. I think SDG&E and a variety of others are in favor of that.

But my understanding is that, as you just said, it's more likely that we're going to have phase in, and that provides an incentive for green direct access. If that phase in does get going to the head of the line of that provides the incentive.

If you don't have that phase in, then the incentive disappears.

**PRESIDING COMMISSIONER MOORE:** Thank you very much.

**MR. MORSE:** Okay. Thank you.

**PRESIDING COMMISSIONER MOORE:** Appreciate it.

Eric, did you have other comments?

**MR. MILLER:** Yes, thank you. I just had one brief reaction to something Jan and others had said.

That I think today we've talked, as you mentioned, green pricing or green marketing and a lot of things, and I can't claim to clear up all of them, but I

think there are two principal things that have been on the table today that I would like to try to focus on.

And maybe taking the almond analogy, you know, one that having billboards up telling people how good almonds taste is a good thing to do. And, you know, if you want people to buy almonds, that's a great thing. The thing is, though, that people don't buy almonds from billboards. They buy almonds from grocery stores.

And there's a physical component to this, and there's a marketing component to this. And having a consumer know that almonds taste good doesn't do them a lot of good if they're sitting in a rail car in Stockton. There has to be a mechanism for packaging those up and getting them directly to the customer so they can buy them in a quantity that makes sense to them.

And similarly here I think there is a component of this which is there's a consumer education what is green power mean, why is that desirable, what does it do for you, what are the issues, what do you need to know as a consumer to buy it. Terrific stuff.

I mean that there should be a broad base public governmental and public sector, governmental sector and private sector, hopefully coordinated an initiative to over a long-term basis to educate consumers about that. I think that's terrific.

Terrific in importance because no one entity can do that on its own, and it's important. But we shouldn't distinguish that. You have to understand it's very different, though, from whether or not there is actually a mechanism by which the consumer has the ability to actually purchase that product.

And I think one of the key things we're trying to focus on, I'm hopefully during the transition here, is actually building the infrastructure. I mean today there are no grocery stores in the electricity business. There's no mechanism by which a retail consumer can buy a package of energy of the size that they use it. And there has to be, that's the infrastructure that has to get created.

And if you don't have that infrastructure, all the knowledge about the product in the world won't do people any good because they won't be able to buy it.

And similarly, if you have a grocery store, people don't have any idea what's in it. I guess I'd say that's maybe not as bad because people can go wander around and find out.

I don't want to denigrate in any way the importance of the consumer education effort because we do think it's important to have a combined and broad effort there, but I really think when we've talked, at least when I've been speaking about creating a market, what I mean is creating the distribution system to actually physically get green power from where it's generated into customers' hands. And I think if you were to substitute a billboard campaign for that, there's more than just a marketing strategy difference. It's actually a fundamental difference in what you're accomplishing.

**COMMISSIONER SHARPLESS:** But if I could, Eric, is your comment directed at something that I said in response to Bob Judd's comments?

**MR. MILLER:** Yes.

**COMMISSIONER SHARPLESS:** Well, I think maybe you misunderstood my point.

I think I understand the need for a distribution system and the need for a consumer education system. What I was trying to find out is where his concern was. Whether it was for the distribution system or whether it was for the consumer education system.

And unless I misunderstood him, he thought, you know, because he wanted to do a pilot test, well, what are you talking about when you do green pricing pilot test? Are you doing a green pricing pilot on a distribution system? Are you doing this on a consumer education system? That was the point.

I'm not sure I still quite understand what he told me. He said consumer education. I don't know whether he meant that in the broadest or in the most specific sense.

**MR. MILLER:** Thank you.

**PRESIDING COMMISSIONER MOORE:** Thank you very much.

Now, at this point in the day, the end of two long days of discussion, we've gone through today's card pile about one and a third times getting back to



folks on various issues. Let me just ask if there are burning comments that those in the audience really wish to make that they want to leave us with prior to the Committee reconvening in Diamond Bar on the 12th under Jan's leadership.

So there will be another two shots, probably, at this. Sure, come ahead.

**MS. LONDON:** Is there an agenda?

**PRESIDING COMMISSIONER MOORE:** Yes.

**MS. LONDON:** Okay.

**PRESIDING COMMISSIONER MOORE:** And do we have it published yet?

**COMMISSIONER SHARPLESS:** Yes, it went out.

**PRESIDING COMMISSIONER MOORE:** The agenda is out.

**MR. MASRI:** It's in the Hearing Notice that went out. Item 8, I believe, on that notice is the agenda for that day.

**PRESIDING COMMISSIONER MOORE:** Let me turn to Marwan and ask him to wrap up some of his thoughts on the hearing thus far, and then I'm going to return back to the dais here for some concluding comments on the part of the Commissioners.

Marwan.

**MR. MASRI:** Thank you, Commissioner.

I would just like to say that we probably all realize how difficult this job is going to be to get something done that's big in a very short period of time. And I think for this to be just to ease, not to make it easy, but to ease the pain of this, it will be the more information the Committee and Staff get from the participants, it's just going to make the job a little bit easier.

I know in the last two days we have gotten quite a bit of useful information from everybody who came up. But there are some big questions that still really were not touched on by the participants. And I would just like to say that any time you have information you'd like to pass on to the Staff, it is welcome.

We have not heard today about specific suggestions on how to make the industry more competitive or how to determine who is competitive today and who is likely to be more sustainable if they got the assistance. Those big questions.

The CTC rebate portion of the fund. How big or large is that meant to be.

So as you look at this agenda that went over today, and you think there is some information you can provide to us as we go through this, I just want to encourage that because there were some questions we did not get a whole lot of information on.

That'll be it.

**PRESIDING COMMISSIONER MOORE:** Thank you, Marwan. Jan.

**COMMISSIONER SHARPLESS:** Well, I guess I've said quite a bit today, but I do appreciate the lively debate. It was a little less reserved but still polite. I don't know, it's like there's a tension out there where people are afraid that they must be polite.

But what we are really after is information, and I think that there have been some concepts and some ideas that I hope people will now go back and perhaps work on and think about as ways to deal with the various issues that we're all trying to grapple with as we try to put together a comprehensive proposal.

And Marwan's right. There are issues that the Committee are dealing with that are more specific that really haven't been addressed, and I think we still need to deal with those issues as we go through the workshop process.

It's true we set up several workshops. We do that because of the public noticing requirements. But it was difficult to be specific for the agenda for the 12th because we hadn't had the meetings on the 4th and the 5th. And we did not want to foreclose or presume what we might want to talk about on the 12th until we had the 4th and the 5th. So we, by scheduling them the way we've scheduled them, the difficulty has been to be specific in those agendas that we had to notice ahead of time.

So we, I think, Commissioner Moore and I, are at a juncture here where we're trying to figure out now how to focus the upcoming hearings because we do recognize -- workshops -- because we do recognize that there are activities going on and conversations taking place where ideas are beginning to formulate. And we would like to see that process go, but we would like to keep the workshops gathering the information and going through the ideas the people have.

Now, the notice on the 12th deals with some of the issues that are in the legislation that we didn't schedule for the 4th and the 5th because we thought the schedule would be too big. An unmanageable bite. We will plan to go through those items. I think they're labeled, aren't they, Marwan, non-renewables?

**MR. MASRI:** Yes, Item Number 8 on page three of the notice. The label said non-renewables issue, and i.e., cogeneration facilities using energy from environmental pollution and their process micro cogeneration and fuel cells.

**COMMISSIONER SHARPLESS:** And some people say why are you dealing with this, these aren't renewables. Well, we're dealing with it because the Legislature said consider it, and consider it we will.

**MR. MASRI:** If I may just comment. I think some people were asking why are they being called non-renewable.

**COMMISSIONER SHARPLESS:** Oh, I beg your pardon. I misunderstood.

**MR. MASRI:** And some of these people think that this pollution burning process, for example, is a renewable, some of those proponents.

**MR. KELLY:** Just a point of clarification. Will the hearing then on the 12th deal solely with Item Number 8 on the notice?

**PRESIDING COMMISSIONER MOORE:** No, I'm about to add a few things to it.

**MR. KELLY:** So I better plan my --

[Laughter]

**COMMISSIONER SHARPLESS:** I think I'm in an interesting position because Michal's planning, and I'm the one that has to carry it out, and I don't know what he's going to say.

**PRESIDING COMMISSIONER MOORE:** Most enviable spot of all.

First of all, I want to thank everyone who stuck with us for the last two days and who plans to be with us through the duration of this ride, which March 31st, but most of the significant work is all going to be front loaded. So we're very grateful for your help. And I want to thank you all for coming and for lending that help.

Second, I want to talk just a moment about the issue of consensus building. We understand and we've reiterated the importance of that again and again. We haven't assigned anyone to go out and do that. We've simply accepted the fact that it is taking place, and we know a few of the individuals that are doing that.

It would be helpful if you have a consensus building group, if something forms around a nucleus of some kind, then we'd like you to tell our Staff that it's going on so that we can, at the very least, have some appreciation of the progress that you're making.

Should there be, and we fully expect that there will be, some significant progress prior to the 12th that may want to be presented to the Committee, in this case Committee members me by E-Mail and Jan in person, won't have very much time to digest those. So if there is something that is beginning to be flushed out, let me just suggest that the Committee will want that in the fullest context that you can present it.

In other words, you can't just say, well, we got a consensus on this item without giving the justification for it without presenting some of the alternatives that are there to think about, without presenting the cost figures, etcetera.

The data that support it, the arrival of a consensus is going to be important for the Committee to be able to understand whether it's something that we would be able to support in the end.

So if there is consensus building, be prepared to talk about it and to lay some of the details out for the Committee on the 12th, if that's when it's starting to emerge, and know that the Committee will probably then take it up again and have a meaningful discourse on it in a reiterative dialogue on the 19th.

That you can't expect Commissioner Sharpless to react to something that will be maybe literally hours or minutes old. You shouldn't expect that, but you should be beginning to make the case where it is possible to make it.

And, as I said before, very important for us to forge consensus building where it is possible.

There may be items that were considered to be unresolved in

everyone's mind as a result of what we did today. I think chief among them are still some dispute about definitions and some dispute about what the criteria are that might be used. There have been various efforts made to bifurcate, trifurcate, some of the issues in the bill.

It is, having discussed this in an open forum and now having the thought processes that you are going through by yourself with your own group take place, it will be very helpful, if there's a coalescence of opinion about definitions or the criteria to be used, if we next see them in writing. And the earlier the better.

So where you've had fleeting thoughts or something that caused you to come to a conclusion, Traci is a good example of that with her conclusions about what her client could or could not support at the end of the day, where that's happened, it will do us a lot of good to see what your thought processes bring to you. And bring us and present it to the Committee in writing at our next meeting.

And I would say that the key item, as Ms. Sharpless is reminding me, is that question of certification and what constitutes a reasonable process and what constitutes a reasonable ranking criteria. So where you can come up with those recommendations in writing, we would be in your debt to see them.

With that, I'm going to close the Committee workshop and thank you once again and look forward to seeing you at the next one.

Jan.

**COMMISSIONER SHARPLESS:** Commissioner Moore, if I could just clarify. The comments, which I agree with a hundred percent, if there -- I think there's an "other" column on the agenda for the 12th, is there not, Marwan?

**MR. MASRI:** I believe the way it is right now, Commissioner, there isn't.

**COMMISSIONER SHARPLESS:** Oh, well, it doesn't matter. There is another --

**MR. MASRI:** You can add that.

**PRESIDING COMMISSIONER MOORE:** There is now.

**COMMISSIONER SHARPLESS:** Where, if there is progress in those areas that Commissioner Moore has indicated, it would be valuable to begin to hear

some of that on the 12th. So we'll leave the agenda open to be available for presentations in those areas.

**PRESIDING COMMISSIONER MOORE:** Thank you all.

[Whereupon the hearing concluded at approximately 4:20 P.M.]

**CERTIFICATE OF REPORTER**

I, **A. FLYNN**, a duly commissioned Reporter of **CourtScribes**, do hereby declare and certify under penalty of perjury that I have recorded the foregoing proceedings which were held and taken at the **CALIFORNIA ENERGY COMMISSION** in Sacramento, California on the **5th day of November 1996**.

I also declare and certify under penalty of perjury that I have caused the aforementioned proceedings to be transcribed, and that the foregoing pages constitute a true and accurate transcription of the aforementioned proceedings.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in the outcome of said hearing.

Dated this **14th day of November 1996** at Foresthill, California.

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**A. FLYNN**  
**REPORTER**